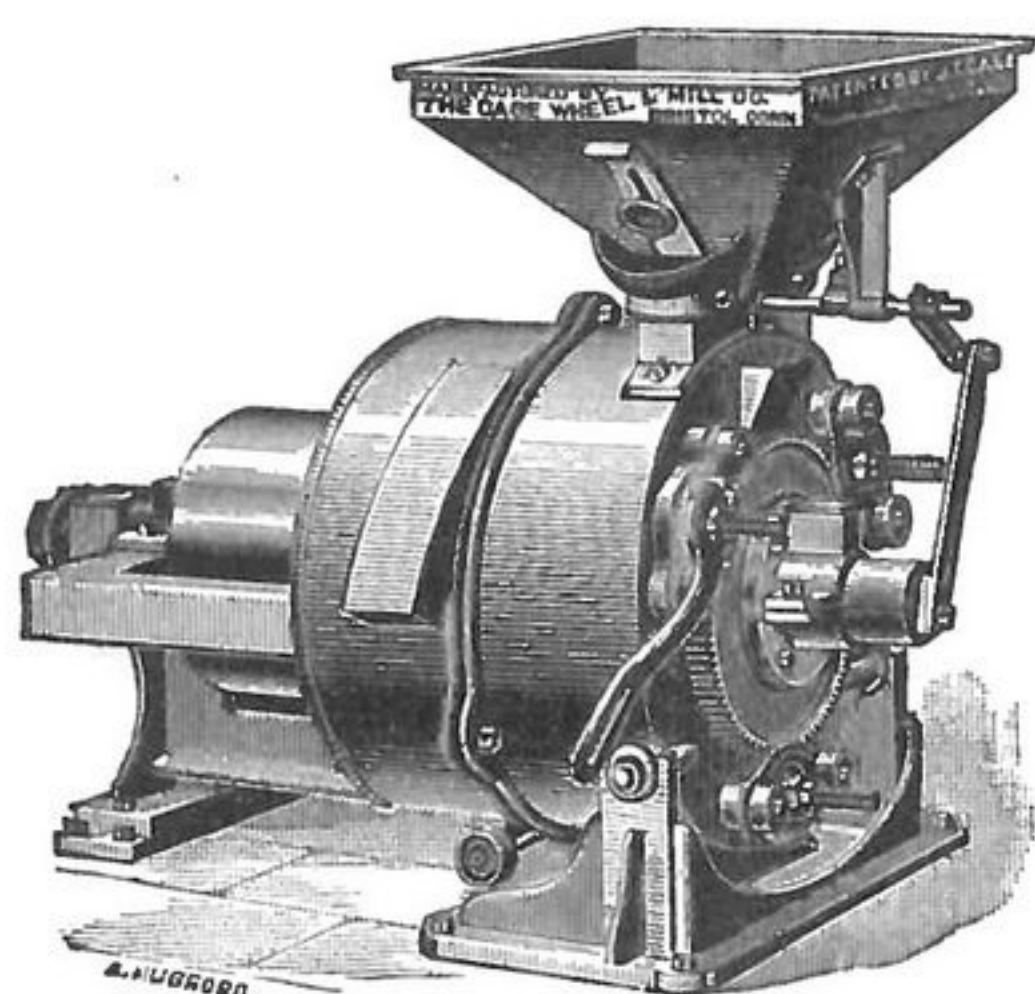


PUBLISHED EVERY MONDAY MORNING.

VOL. XXI. No. 16.

BUFFALO, N. Y., DECEMBER 16, 1889.

\$1.50 PER YEAR.



VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS.

(J. T. CASE'S PATENT.)

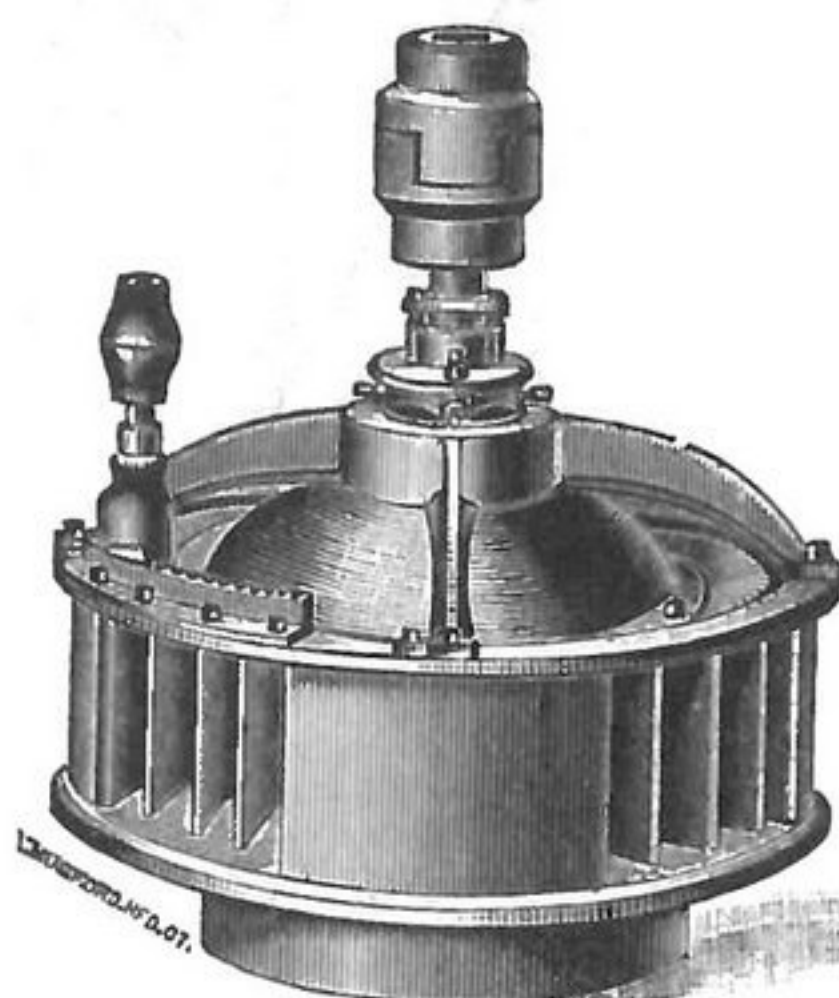
FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & Co., Meriden, Conn.
 "Superior to any mill in use."—Geo. WESTON, Bristol, Conn.
 "The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.
 "We take pleasure in recommending it."—GARLAND, LINCOLN & Co., Worcester, Mass.

SEND FOR CATALOGUE—ILLUSTRATED AND DESCRIPTIVE.

The Improved National Turbine Water Wheel

The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUNDRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.

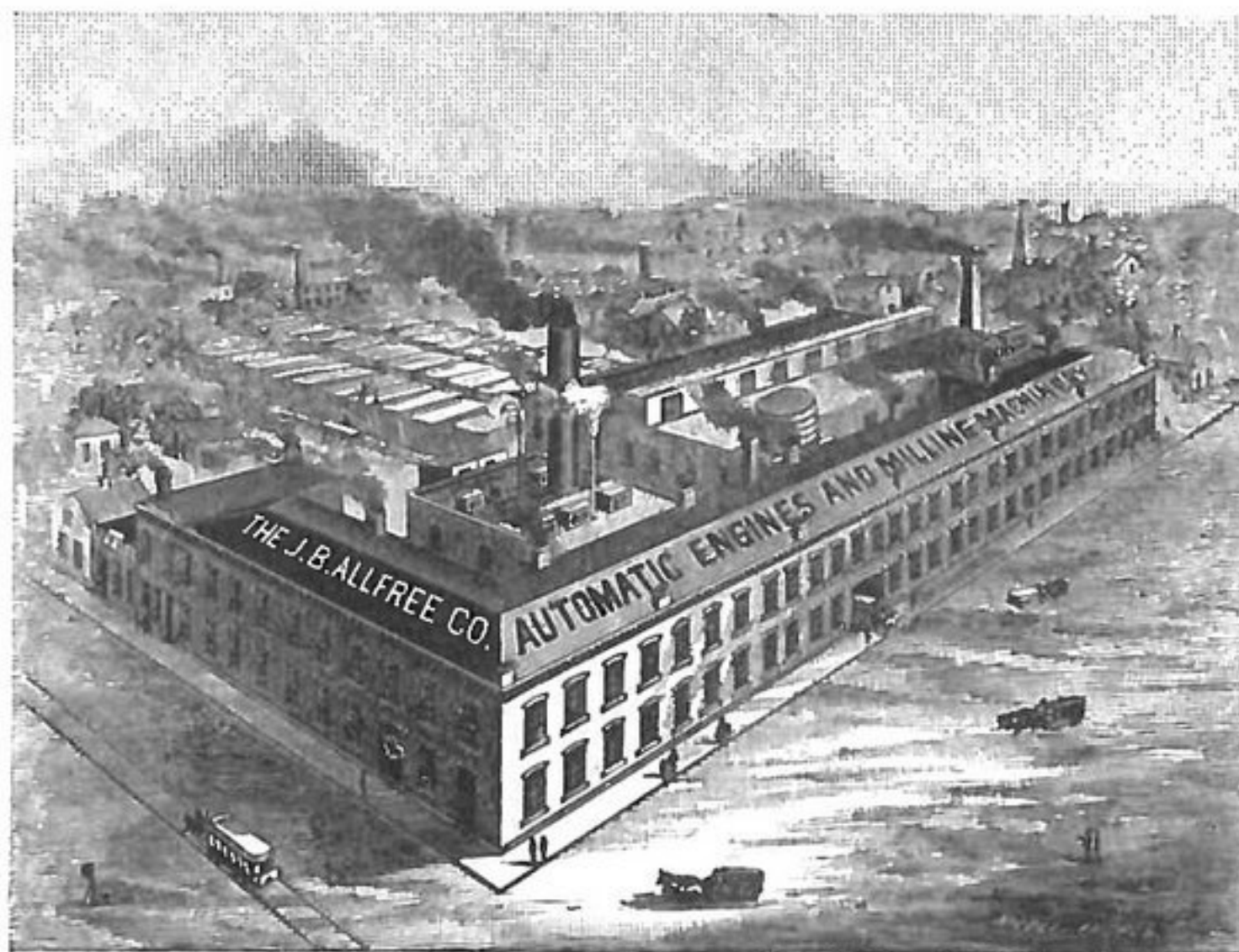


The Case Wheel & Mill Co., Bristol, Conn.

WE BUILD THE MOST EXTENSIVE —LINE OF— Flour AND Corn Meal Milling Machinery in America

BIG SANDY, TENN., Dec. 20, 1888.
THE J. B. ALLFREE Co.

GENTS: The mill we bought from you last summer is doing good work, and we are well satisfied with it. It takes less power to run our mill than any mill we ever saw. We like your machinery for its simpleness and easy adjustment; we like the adjustment of rolls better than any we have ever seen. We make a good yield and a small per cent. of low grade. We can successfully compete with any mill in our section of the country. We like your machinery for it makes better clean up and there is nothing wasted. BULLOCK, WYATT & Co



LEWISVILLE, IND., Dec. 11, 1885.
THE J. B. ALLFREE Co.

GENTS: Replying to yours of recent date, I have to say that the mill you put in for us is doing all you promised for it and more. Its working from the very start was phenomenal; every part seemed to be perfect. Your rolls certainly surpass all others as to the manner of adjustment. There is not one of your machines, from the flour dresser down to the bran duster, that is not deserving of the highest kind of praise. As to our flour, we do not fear to compete with anybody.

T. W. HALL.

FLOUR MILLS. CORN MILLS. HOMINY MILLS.

Our machines are constructed of the best material and workmanship that can be procured.

Address for catalogue, etc.,

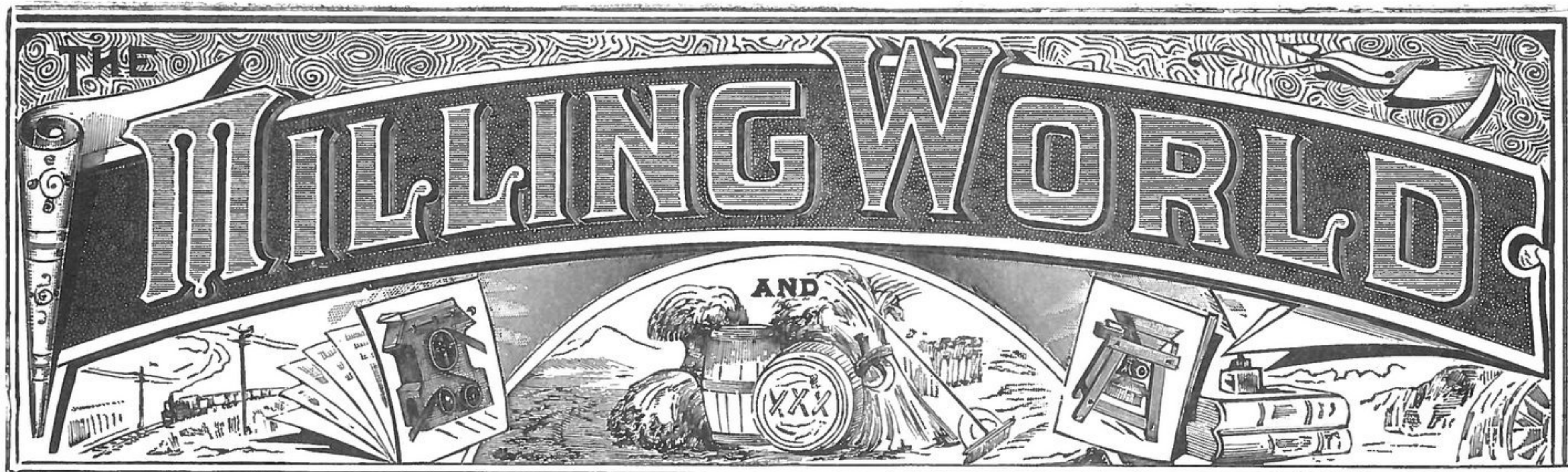
The J. B. Allfree Co., Indianapolis, Ind.

CASE.

CASE MFG. CO., COLUMBUS, O.
GENTLEMEN: If we were to build a hundred mills we
would not permit any other than the "CASE" roll to
enter them. They are the best roll on earth.
Yours truly,
W. C. MANSFIELD & CO.

W. C. MANSFIELD & CO.,
MERCHANT MILLERS,
CLEVELAND, TENN., AUG. 29, 1889.

CASE.



CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXI. No. 16.

BUFFALO, N. Y., DECEMBER 16, 1889.

\$1.50 PER YEAR.

AMERICAN millers are not afraid of running out of grain this year. With a crop of about 490,000,000 bushels to draw from, they will be able to keep their mills going.

ONE year ago nearly every miller met was grumbling. The large millers were grumbling because the conditions did not encourage exportation, and the small millers complained that dear and poor grain, with the market demanding cheap and good flour, made them run at a loss. Now complaints are few and far between. There is an abundance of good wheat at fair prices, and the millers are generally either too busy to make the effort to grumble or too contented to feel like grumbling.

TIME brings some interesting changes. Two years ago British journals, theorists and scientific experts were of the opinion that the fine spring wheat of Dakota and Minnesota had deteriorated and was "not what it once was." At present there seems to be prevalent in Great Britain an opinion that British millers, scientists and expert theorizers have never seen any genuine, unadulterated, unsophisticated fine hard northwestern spring wheat. The Britons now say that the Yankees keep all the really fine wheat at home and export only inferior grain. Who stands ready to deny the British accusation?

IN another place in this number is presented an article from a prominent Canadian journal, showing how the peculiar tactics of discrimination practiced by the Canadian Pacific Railway, now managed by an American president, by the way, is damaging the northwestern provinces of the Dominion. The facts and figures presented explain two things very clearly. They explain, first, why Manitoba has not gained new settlers nor kept the old ones, and second, how the Canadian Pacific, by cutting rates on American soil as American roads are not permitted to cut them, because of our fool Interstate Commerce Law, has been able to profit at the expense of the American roads. Of course the damage done to Canadian interests by the Canadian Pacific are enormous, but that is not a good reason why that road should be allowed to go on doing on American soil what is forbidden to American roads. The Yankee manager of the great subsidized Canadian octopus is doing all he can to prevent immigration into Canada, but his action will sooner or later be disapproved by the Canadians, who were taxed to build the road and who naturally object to seeing it used to injure the Dominion as it is now doing.

EVER since the wheat crop of 1889 in the Northern Hemisphere was gathered, there has been a steady anticipation of better prices for wheat, but the anticipation, while still held, has not been realized. There really seems to be no good reason, assuming the reports of the gathered Northern Hemisphere and those on the condition of the growing Southern Hemisphere crop to be at all accurate and reliable, to believe that any marked advance in wheat is possible. The Northern Hemisphere has garnered enough wheat for its needs. The growing crop in the Southern Hemisphere promises a considerable surplus over home needs. That sur-

plus will in a very few weeks begin to be measurable and available. Every bushel of it that finds its way north of the equator will lessen the chances of increased wheat prices. Where, then, is this mysterious "strength," of which so much is said? India and Russia are said to be "stripped of surplus wheat," and still both those countries continue to ship weekly enormous quantities of wheat to the importing countries. Would it not be well to open the year 1890 with this legend written over the wheat market: "The statistical position of wheat is theoretically very strong and practically very weak"?

SELF-CONCEIT is a peculiar quality of the human mind. It often blinds its victim to his own littleness, makes him think he is running the universe, and leads him to imagine that, without his aid and suggestions, all the forces of nature would fail and all the things that are would cease to be. Ex-Secretary of Agriculture Norman J. Colman seems to be one of the most hopeless victims of self-conceit produced in or by the nineteenth century. Attention has been called to his recent convention of so-called wheat-growers, and in these columns have appeared liberal quotations from his harangues before that wholly ridiculous body, so that our readers are familiar with the quackery of the man. From one end of the country to the other that convention has been laughed at as a meeting of dead-duck politicians, grain-gamblers, wire-pullers of various kinds and everything else but real, genuine, horny-handed farmers, and the Colman proposition, to unite the real farmers in a gigantic trust, aided by all the powers of state and nation to cheapen the wares of all other producers to farmers while making dearer the wares of farmers to all other producers, has been the standing joke of an "off-year" in politics. The popular idea of Colman is that he is a very small man, quacky, fussy, incoherent, rabid, frothy and ridiculous. And what is Colman's idea of Colman's self? Colman's "Rural World," the St. Louis agricultural paper devoted to the absurd Colmaniac idea of a trust of farmers, sizes up Colman in these words: "The speech of Gov. Colman before the Inter-State Wheat Growers' convention has created much discussion and consternation among the bulls and bears of the wheat product throughout the country." We would like to know where some of this awful Colmaniac "consternation" has been seen, or felt, or heard. So far as appearances go, the bulls and bears have been serenely unconscious of Colman's existence. They have not discussed Colman. They have not shown any consternation. They have not changed their practices one iota. Since the Colmaniac fulmination, Cudahy has cornered and squeezed Old Hutch, and other bulls and bears have been quite as active as they were before the Colmaniac volcano went into business again at the old stand. The popular idea of Colman and the Colmaniac idea of Colman do not appear to "hitch hosses nohow," as it were. There has been some shivering in the United States recently, but the uninitiated had attributed it to the approach and the arrival of winter. They will all be surprised to learn that it was not cold weather, but Colmania, that caused their teeth to chatter. Poor bulls! Poor bears! Norman J. Colman will tan their hides and send their meat to the refrigerator!

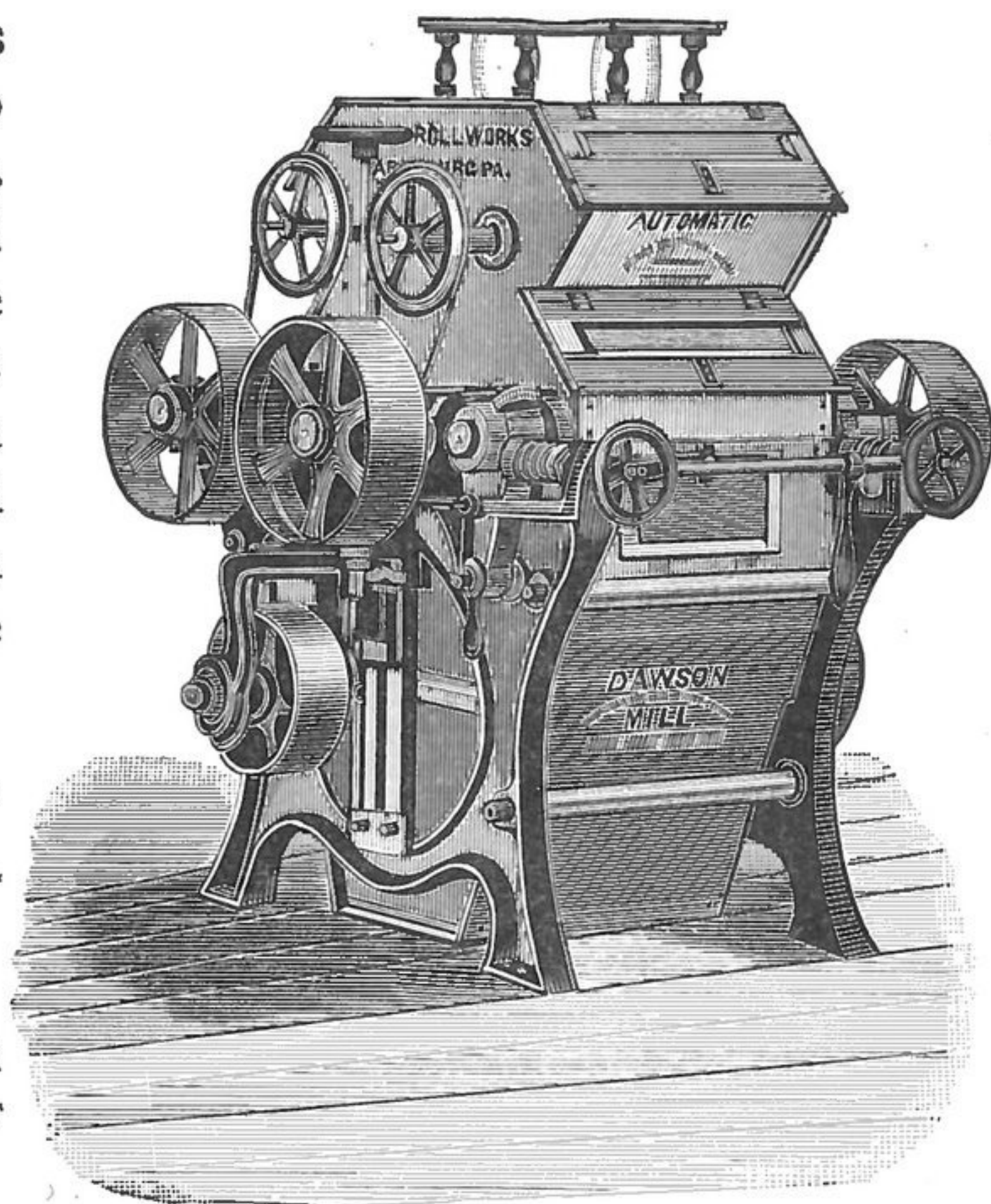
Dawson's Roller Mill

Is acknowledged to be the very best in the market. It has our Patent Automatic Centrifugal feeder, never failing to feed the stock the full length of rolls in an even sheet. It is the Latest and Best feed out, uses less power and is simple in construction. It can be placed on any style of machine with little expense. We use for roll bearings phosphor-bronze metal which will admit rolls being run at any speed without heating and with little friction, and uses little oil. We use the Dawson Corrugation, which is admitted the best in long or short system mills as the action is granulating rather than CUTTING.

We have a large plant to Re-grind and Re-Corrugate Rolls.

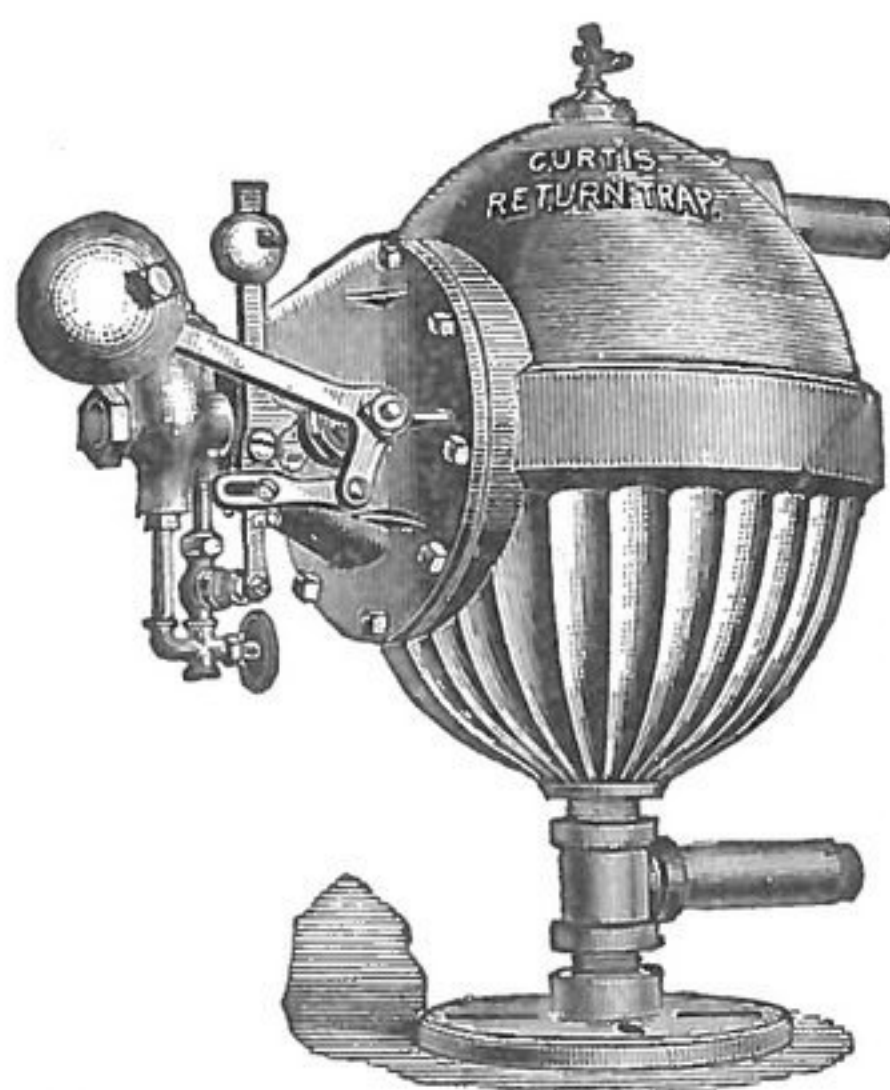
Owing to our late increased facilities and central location we are enabled to ship goods promptly on the shortest notice.

PARTIES CONTEMPLATING REMODELING THEIR MILLS OR BUYING ANY ROLLER MACHINES ARE REQUESTED TO PUT THEMSELVES IN CORRESPONDENCE WITH US.



FOR PRICE LISTS AND CIRCULARS, ADDRESS,

Dawson Roll Works, Harrisburg, Pa.



THE CURTIS PATENT RETURN STEAM TRAP.

IT is noiseless, positive, rapid, will return all condensation back into the boiler, and works equally well in connection with reduced pressure or exhaust steam, also when the return is below the water line of the boiler.

THE CURTIS REGULATOR COMPANY,
NO. 74 BEVERLY ST., BOSTON, MASS.

GENERAL AGENCIES.

New York, 109 Liberty st. Minneapolis, 210 S. Third st.
Philadelphia, 2035 N. Front st. Chicago, 218 Lake st.

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IS MADE BY THE
QUEEN CITY PRINTING INK CO.
CINCINNATI, O.

WHEN WRITING TO ADVERTISERS PLEASE MENTION "THE MILLING WORLD."

The Canton Cabinet Filing Case Company, Canton, Ohio.

MANUFACTURERS OF

The New Buckeye Document Case & Letter File; Also All Kinds Office Furniture



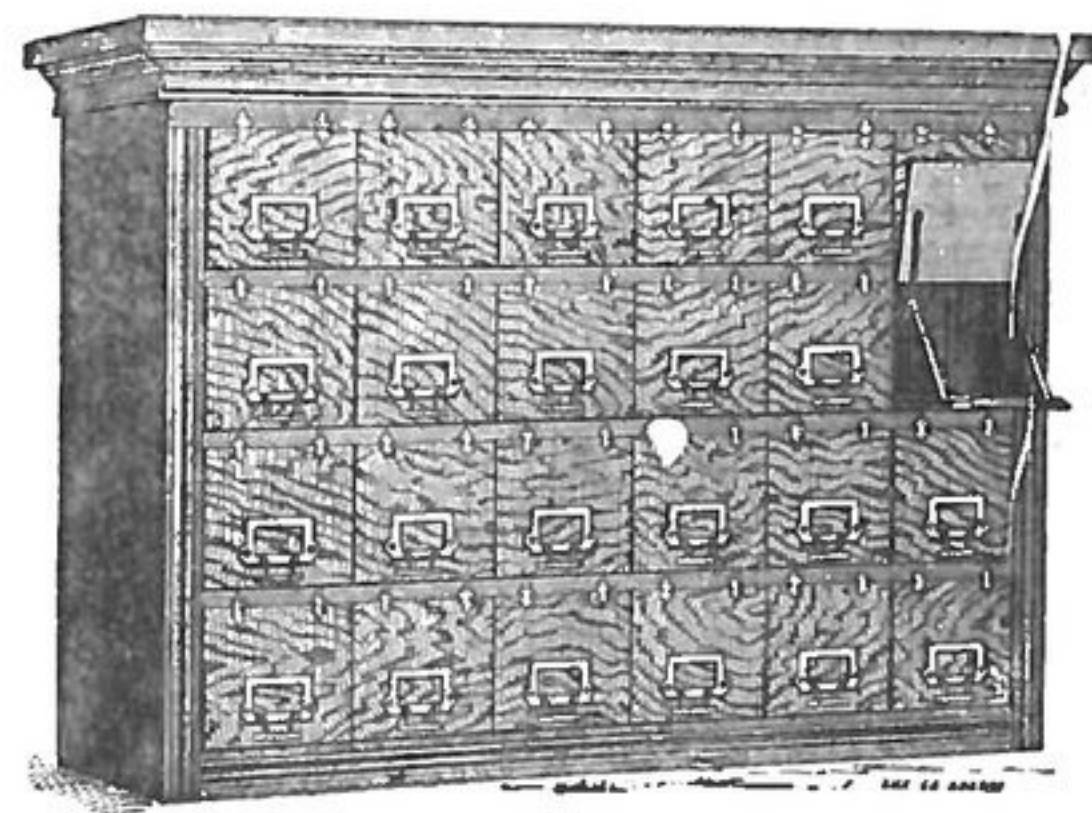
NO. 8.

NO. 8 Represents one side of one of our Revolving Cabinet Letter Files and Document Cases Combined. It contains 30 Document Drawers and 8 Letter File Drawers. In filing letters we use first VOWEL of name on front of drawer, and LETTER FOLLOWING first VOWEL on Index Sheet within drawer. We also make more exhaustive systems which contain from 6 to 100 or more Filing Drawers.

NO. 1 Represents one of our small Document Cabinets, for use on desks or brackets. Action of drawer can be seen in the cut. When front is raised inner drawer comes forward, exposing contents of drawer for inspection.

Our Cabinet Files are conceded to be the Most Convenient of Any in the Market. They are Compact, Simple, Complete, Durable and Ornamental.

SEND FOR PRICE LIST AND CATALOGUE.



NO. 1.



PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,
Over Bank of Attica,
McFAUL & NOLAN, - - - PROPRIETORS.
THOMAS MC FAUL. JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application. Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD,
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

WANTED.

Situation wanted by a Miller of 9 years' experience, 24 years of age, of steady habits and willing to work. Address, H. care of The Milling World, Buffalo, N. Y.

WANTED.

Western New York, Ohio and Pennsylvania mills in want of a temperate miller, with 20 years experience, should write to the undersigned, who is now running a first class mill, but would like to make a change this fall. Address, W., care of THE MILLING WORLD. 56

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

FOR SALE.

Merchant and grist mill. The best water-power in Ohio. Situated five miles from Mentor, Ohio. For particulars enquire of C. S. JOHNSON, West Mentor, O. 1216

SITUATION WANTED.

As miller, by an active young man, used to rolls and stones. Strong, willing and not afraid to work. Best of references. Address 'E. N.,' 109 East Eagle street, Buffalo, N. Y. 811

FOR SALE.

Several good second-hand and new turbines of various styles. Second-hand price list and descriptive matter and prices of our new machines sent free. Every one interested in the shortest route to successful milling on rolls or in grinding corn and feed with the least expense of power, should address us before buying.

FLENNIKEN TURBINE CO.,
Dubuque, Iowa.

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

M-I-L-L-E-R-S

Wanting Bolting Cloths should write for discounts on same before purchasing elsewhere to

SAMUEL CAREY
17 Broadway New York.

FOR RENT.

Clinton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 811 Main Street, Buffalo, N. Y. 6tf

FOR SALE.

Full roller mill, 100-hp. steam power; also, a water power buhr mill, dwelling and ten acres of land. Prices low on either and terms easy. Address, J. R. ENGLISH, Piketon, Ohio. 10

WANTED.

A miller who can purchase an interest. Business rapidly increasing. Must enlarge mill and add machinery. Only mill in this, Gray's Harbor, region. Good water-power. Address, REV. HIRAM F. WHITE, Elma, Chehalis County, Washington Territory.

THE November fire-losses in the United States and Canada footed \$20,082,000. The flouring and allied industries contributed about \$913,000. The total for the first eleven months of 1889 is \$124,644,450, against \$118,957,309 in 1888 and \$105,400,000 in 1887.

EDITOR HALL, of the "Modern Miller," appears to think that Kansas City, Mo., ought to become a first-rate milling center. In another place in this number of THE MILLING WORLD is a letter from him, giving his reasons for the faith (in Kansas City) that is in him.

READ carefully the new advertisement of Edward Germain, of Saginaw, Mich., which appears in this issue. He is the sole manufacturer of the famous Cowles "Reliable" sectional wood pulley, which is patented in the United States, Canada and European countries. Every user of pulleys will do well to correspond with Mr. Germain, with the view of learning full particulars concerning the construction and the prices of his well-known pulleys.

Is it really true that the Canadian Pacific Railway has been put in the charge of an American president for the express purpose of affording the American Northwest better freight rates than are afforded to the Canadian Northwest? At present the Canadian line is helping American shippers at the expense of Canadian taxpayers. Probably the Canadian taxpayers will soon conclude that it would be wise to demand that their road shall be placed under the American Fool Interstate Commerce Law, so that it can be constrained from giving better rates to Americans than it gives to Canadians.

MINNEAPOLIS has certainly lost her famous air-tight cinch on the milling center supremacy business, if reliance is to be placed upon recent reports in connection with great milling enterprises planned for rival towns. In case the business should be made unprofitable or less profitable in Minneapolis, by reason of always possible railroad complications, there will be some very sick Britishers in the cool Northwest, who may find it difficult to reap a profit of bronze cents where they expect to reap a crop of golden dollars. The more the Minneapolis situation is studied, the more certain does it appear that the owners of the mills in that town had very good reasons for selling their plants to foreign investors.

RECENT reports from Minneapolis indicate a really serious falling off in the famous water-power of that famous milling town. It is a common thing for the weekly output of flour in Minneapolis to be cut down a quarter or a third by low water. Only the mills furnished with steam-power equipment can grind right along uninterruptedly. It is claimed, or asserted, that "all the available water-power at Minneapolis is already utilized." If that be true, that city will receive no more great flouring-mills, for, if great mills must use steam-power, it would be wiser to build at points where transportation facilities are better. Duluth is reaching out after great milling interests. In the meantime, Buffalo and Niagara Falls should not be ignored by those who are investing in milling plants. Offered advice may be odious, but it is plain that the British syndicatists, who have planted several millions of dollars in Minneapolis mills, could have done better by starting new plants at Buffalo or Niagara Falls. Buffalo offers especially great advantages in every conceivable way to intending investors.

POINTS IN MILLING.

PROBABLY one of the most marked changes wrought by the recent revolution in milling processes and the application of steam-power to flour-making may be seen in the location and appearance of flouring-mills. In the "good old times" of general buhr-milling and "nutty-flavor" flour and "mossy mill-wheels," the mill nearly always was found snugly stored away at the base of a hill, in shade and gloom, in darkness and dampness. The revolution that displaced water for steam power lifted the mills out of the romantic vales and placed them quite as often on the highest ground.

THIS change alone is sufficient justification for the revolution. The new modern mill has all the advantages of good light, good ventilation, and freedom from undue moisture and mildew that were not possible to the old water-mill down at the bottom of the gorges frequented by natural water-powers.

ANOTHER most satisfactory change is in the appearance of the mills. The old buhr-millers held the idea that the only material fit for a mill building was stone. They knew nothing better than the cold, damp, mossy old tumble-downs, in which the flour would almost mold while being ground. That idea has gone with the old favorite haunt at the foot of the hill. The new steam mill is either brick, which is better far than stone, or else it is wood, which is far better than either stone or brick for dryness and general comfort for the occupants, while it offers better keeping for both grain and flour.

THOSE "queer Dicks," the poets, may bewail the disappearance of the moss-covered old catarrh, rheumatism and consumption breeding grain-spoilers and flour-molders under the damp hills, but the wide-awake individual, who understands that the "nutty flavor" was mainly dirt, who appreciates the full value of great improvements, rejoices in the new, light, airy, pleasantly located modern mills. He knows that the "modern process" flour is as much better and more desirable than the old black-and-tan product of the buhr-water-mill-nutty-flavor days of milling, as the smart, snug, comfortable new steam mill is handsomer in appearance than the old ramshackle rocky tumble-down of lame rhetoric and alleged poesy.

TRULY the revolution has been a complete one. Within one year, in one section of the country where water-power formerly was all the go, I have visited over 100 new steam mills, most of them owned by former owners of old water mills. The old mills are still standing, many of them, at least, but the owners have found profit and comfort in new things. They have climbed out of the gorges and are now basking in the sunlight.

WHEREVER I find a flour-maker still dwelling in one of the old-style mills located at the bottom of the old-time-orthodox glen, I generally find him longing to get up on higher ground. He generally has a neighbor near him who has moved up, and he finds his customers inclined to join the procession and to seek the possible benefits of new things.

THE practice of grinding mixed wheats does not seem to find much favor in the United States. Recently I found one mill of considerable size in which mixing had been tried. The superintendent is an Englishman, and he induced his employer to allow him to try mixing before grinding. His English mixing experience was called upon to select grains for trial "blending," and he figured out a programme saving nearly \$1 a barrel in the cost of production. So much of this wheat for strength, so much of that for color, and so much of the other for flavor, and, presto! the result would be a barrel of flour \$1 cheaper in cost and \$2 better in quality than the mill had ever turned out before!

IT READ well on paper, but the solemn fact of grinding revealed the other solemn fact that the product was neither high nor low grade, neither very hopelessly bad nor su-

premely good. It was tried by a baker, and his verdict was: "I don't want any more of the stuff. I can't tell what's the matter with it, but something is the matter. It may be all right, but it will not answer my purpose."

THAT "British blender," as his subordinates have sarcastically named him, has come to the conclusion that "these confounded Yankee wheats are all too nearly alike to answer well for blending, don't you know!" He doubtless will conclude before long that, in order to "blend" well, wheats should be grown in lands far apart. For the present he will perforce go on grinding single wheats on American methods.

SUPPOSE the Minneapolis mills were to pass into the control of British foremen and flour-makers in general, will the products of those mills continue to hold the high place which they have long held, both at home and abroad? The question is a perfectly legitimate one, when the observer takes into consideration the solid British conservatism, which acts strongly against either the abandonment of old or accustomed processes or the adoption of new or unaccustomed processes. Should a British foreman, accustomed to blend from ten to twenty wheats, and to use washers, driers, steamers, whizzers and other curious contraptions not familiarly known in Minneapolis, be put in charge of one of those giant establishments, he would feel like a cat in a strange garret full of mice, without appetite for mice or claws to capture them. The grafting of British ideas and practices on the system in the "supreme milling center of the United States" will be watched with interest.

WHY MANITOBA HAS NOT PROSPERED.

Following is an interesting article on the cause of the slow growth of Manitoba, taken from the Toronto, Ontario, "Mail," showing how the discrimination of the Canadian Pacific Railway has injured Canadian interests: The Canadian Pacific charges 45 cents per 100 pounds, or 27 cents per bushel, for transporting wheat and flour from Winnipeg to Toronto. It carries those articles from Minneapolis to Toronto in connection with the Soo line for 25 cents per 100, or 15 cents per bushel. It charges 63½ cents per 100 for conveying Manitoba wheat and flour from Winnipeg to tide-water at the Canadian ports of St. John and Halifax. Yet it charges only 35 cents per 100 for carrying Minneapolis wheat and flour to New York, and 40 cents to Boston and Portland, Me. On the other hand, it charges 45 cents per 100 for carrying Minneapolis stuff to St. John.

Taking Montreal as the Atlantic port, the Canadian Pacific rate from Winnipeg to Montreal is 46 cents per 100, or 27 3/5 cents per bushel. The rate by the Canadian Pacific from Minneapolis to Montreal is 25 cents per 100, or only 21 cents per bushel. The Canadian Pacific rate at present from Minneapolis to Liverpool is 50.98 cents per 100, or 30 3/5 cents per bushel, compared with 38 1/10 cents from Winnipeg to St. John or Halifax. These figures, which might be extended indefinitely, are taken from the posted rates of the Canadian Pacific and its American feeder, the Minneapolis, St. Paul and Sault Ste. Marie line. What the private rates, if any, granted to large Minneapolis shippers may be, is a matter of no concern just now. It is beyond dispute that the Canadian Pacific is building up the Northwestern States at our expense. The differential rate in favor of the Minneapolis shipper is a subsidy to the Dakota and Minnesota farmer against our own people.

In land and cash the Dominion has subventioned the Canadian Pacific system to the extent of \$160,000,000. The main line has received public aid, including the Government guarantee, amounting to \$129,000, and the minor lines which the company has absorbed to \$27,000,000. The amount of actual cash, that is, of borrowed money, we have paid exceeds \$90,000,000, or \$18 per head of the population. This was given on the understanding that the road was to be a national road, developing the North-West and binding the provinces together. As things stand, the road has become an agency for promoting settlement south of the line while effectually retarding it here.

President VanHorne has a good defense from his point of view. The moment the Canadian Pacific began to extend itself into American territory it ceased from the nature of the case to be a national Canadian route in the true sense. For it had then to compete for American freight, and in order to compete successfully had to make its rates as low as those of its American rivals and lower than those granted to the North-West settler. It has to regulate its rates from Minneapolis by the rates offered by American lines and the Grand Trunk, which, running through a well-populated region to the seaboard, can afford to carry grain at a low figure; whereas the main line of the Canadian Pacific from Winnipeg eastward traverses a vast desert of rock and muskeg, and, in the absence of local business, a high through rate is inevitable. In other words, so far as the Manitoba traffic is concerned, Mr. Van Horne has to fight nature, and nature takes her revenge.

This is a perfectly valid answer from his standpoint, but there is little satisfaction in it for the Manitoba settler or the Canadian people. The fact remains that our great national enterprise is cutting our throats. The real significance of the figures given above can perhaps only be realized by the Canadian settler himself, yet we can all see that they tell heavily against him. It costs 6 cents less to send a bushel of wheat from Minneapolis to New York than to send it from Winnipeg to Toronto or Montreal, and 17 cents less than to send it from Winnipeg to St. John or Halifax. Under such conditions we can not expect a large immigration to the North-West. Why should anybody go in there to pay taxes on account of a Government-aided line which plays into the hands of his competitors, who contributed nothing towards its construction?

If parliament desires to prevent trouble, it had better look into the matter and endeavor to find a solution. The solution which the settler is likely to hit on is the throwing down of the Customs barrier between him and Minneapolis, which would soon bring a number of competing American lines into Manitoba and give him a free market for his grain besides. The question also possesses considerable interest for the Ontario millers, who find American flour thrusting out Canadian flour in spite of the National Policy, as well as for merchants and vessel owners at our summer and winter ports. The subject derives its chief importance from the probable effect of the discrimination, if continued, upon the political relations existing between us and the settler. Even if it be true that the National Policy helps the North-West, which is impossible, it is obvious that our so-called national road is now doing that region a mortal injury.

MILLING PATENTS.

Among the patents granted December 10, 1887, are the following:

Chas. H. Cooley, Hartford, Conn., No. 416,714, grain-scales.

Robert Wilson, Grubville, Mo., No. 416,771, a bag-fastener.

James Dawson, Harrisburg, Pa., No. 416,904, a roller-mill, part assigned by direct and mesne assignments to John H. Dawson and A. S. Norrish, same place. The claims embrace the following points: 1. The combination, with the journal-bearings of the adjustable roll, of a shaft mounted in bearings in the bed-frame, eccentrics fixed upon each end of said shaft in reverse relation and supporting the bearings of the roll, and hand-levers fixed upon said eccentrics, whereby the said roll may be simultaneously adjusted with relation to its horizontal axis at each bearing at either side of the machine. 2. The combination, with the journal-bearings of the adjustable roll, of a shaft mounted in bearings in the bed-frame, eccentrics fixed upon each end of said shaft in reverse relation and supporting the bearings of the roll, and the binding-nuts on said shaft. 3. The combination, with the journal-bearings of the adjustable roll, of a shaft mounted in bearings in the bed-frame, eccentrics fixed upon each end of said shaft in reverse relation described and supporting the bearings of the roll and the binding-nuts and screws.

Benjamin Holt, Stockton, Cal., No. 416,916, a grain-cleaner. This is an improved machine comprising a main

frame, independent shaking-shoes therein, a vertical shaft having horizontal plates formed integral with its upper and lower ends, with holes formed in said plates near the outer ends, supplemental horizontally-arranged plates bolted to said horizontal plates and having integral vertical crank-pins and slotted outer ends, bolts and nuts for securing the plates together, whereby they may be adjusted, and independent journal-boxes, one of which is secured to each shaking-shoe and receives the crank-pin of the adjacent plate.

Wm. S. Miller, Meyersdale, Pa., No. 416,936, a dust-conveyor.

Marcus A. Swing, Washington, Ind., No. 416,968, a feed-regulator. This machine is described in the following claims:

1. The combination, with a suitable hopper, of the revolving shaft having the rubber wheel at its end and formed with the flat recesses, the centrally-pivoted treadle-wires, the board pivoted at its upper end, and the feed-bar. 2. The combination, with a suitable hopper, of the revolving shaft loosely fitting in a bearing at one end, having the rubber wheel at its other end, and formed with the flat recesses, the bearing-block, the pivoted lever-arm formed with the transverse slot and the set-screws, the centrally-pivoted treadle-wires, the board pivoted at its upper end, and the feed-bar. 3. The combination, with the end pieces, the back-board and the top bar, of the board pivoted at its upper end, the curved spring-arms, the feed-bar, the spring-wire, the centrally-pivoted treadle-wires, and the revolving shaft having the rubber wheel at one end and formed with the flat recesses. 4. The combination, with the end pieces, the back board, and the top bar, of the board pivoted at its upper end, the curved spring-arms, the set-screws, the feed-bar, the spring-wire and its screw, the centrally-pivoted treadle-wires and their set-screws, the revolving shaft having the rubber wheel at one end and formed with the flat recesses, the bearing-block, the pivoted slotted lever-arm, and the set-screws.

Bradford A. Mathewson, Providence, R. I., No. 417,063, a hand corn-sheller consisting of a cylinder and ribs, wider at the bottom than at the top, and an enlarged dome-shaped base, and having the cylinder with tapering inward-projecting ribs, the dome-shaped base of a size to permit a hand to grasp and turn the cob, and a projecting flange.

Adrial C. Thompson and Horace Newton, Greeley Center, Neb., No. 447,117, an electric indicator for grain-bins, described as follows: 1. The combination, with a grain-bin or receptacle, of a device for indicating the maximum quantity of grain therein, and consisting of a casing attached thereto and provided with a flexible diaphragm carrying a pin and located within the bin at about the point represented by the plane reached by the grain, a circuit-closer or call-button having a plug with which the pin contacts to close the circuit, and conductors connecting said circuit-closer with a battery and annunciator. 2. The combination consisting of a casing located within the bin at about the point represented by the plane reached by the grain, and provided with a flexible diaphragm, a circuit-closer or call-button located within said casing and adapted to be operated thereby, conductors connected therewith, and a battery-annunciator and hand-operated circuit-breaker included in the circuit.

COTEMPORARY COMMENT.

Duluth appears a little jealous at the suggestion that possibly Buffalo may be chosen for the next big mills to be erected. It must be confessed that Duluth has many advantages as a milling point; so many, in fact, that she is likely to be blinded by her own resources when surveying a possible rival. The fact is, that both cities are ideal milling points. Both have the advantage of all water routes, and any improvement in canals and navigation that affects one will affect the other. One is located nearer the source of supply of raw material; the other nearer the direction of the greatest demand. The prospective builder of a mill might well exclaim, "How happy might I be with either, were t'other dear charmer away!"—*Chicago "American Miller."*

The flour-mills of Minneapolis are greatly troubled with low water and floating ice, and in consequence the output of

flour is growing less each day. Some of the mills have steam-plants and these must perforce fall back on steam. A year ago an expert on water-power inspected the Mississippi river at that point and predicted that the natural motive power would not last long. The Minneapolis papers set up a howl thereat, calling the expert a fool, and swore by their water-courses. The mills are now crowded, and the Pillsbury company is forced to seek some other point where they can build a mill and run it on the modern style, with steam. Verily the great milling center is on the wane. It has to go the way of the Millers' National Association and the official organ.—*St. Louis "Merchant, Miller & Manufacturer."*

The report of the "visible supply of grain" is misleading from the fact that it does not contain the quantity of grain contained in private elevators. The latter grain is equal in quality to that in "regular" warehouses and should be included in the report. The "regularity" of a warehouse should not enter into the question of the quantity of grain on hand. Should prices be advanced sufficiently to warrant it, owners of grain in private elevators experience no difficulty whatever in transferring their grain to "regular" warehouses and have receipts issued for it to be delivered on contracts for future delivery. In the case of wheat the quality is generally above the average, as the owners of the private warehouses purchased the better qualities with the anticipation that it will be called for before the close of the season by the milling interest, who will be willing to pay a premium for it over the prices of the "regular" grades.—*Chicago "Daily Trade Bulletin."*

KANSAS CITY AS A MILLING CENTER.

Millers and capitalists who are looking for investments will be interested in the following showing of Kansas City, Mo., as a milling center, made by Editor Hall, of "The Modern Miller," in the Kansas City "Star": "The newspapers have recently had considerable to say in a general way about the advantages of this point for a large flour-milling business, and now that new grain-elevators are being constructed and the contract is about to be let for another, of 2,500,000 bushels capacity, the opportunity is presented them again to call attention to the superior advantages which this city offers for the profitable investment of capital in this branch of industry. To me it is an anomaly that a portion of the capital that has been lying in wait for investment here for the past two or three years has not long ago found its way into the milling business. Many thousands of dollars have been wasted on experiments with certain lines of manufacturing that, even with success assured, promised but meager returns, and many thousands more are now lying idle, its owners anxious to invest it safely, but being in apparent ignorance of the fact that one of the best opportunities for safe and profitable investment ever offered in any community is offered right here by the lack of mills to grind into flour for the markets of the world the immense wheat crops harvested year after year in the fertile country surrounding us.

"This city should have, before the next crop year opens, a mill of at least 1,000 barrels per day capacity. The site provided, less than \$100,000 would build and equip a mill of such capacity, and we know there are men thoroughly familiar with the business who would unite with local capitalists and put up a good share of the money if the proper encouragement were given them. If our local capitalists do not make an early move in this direction, somebody is bound to come here and snatch the persimmon, for not a miller nor a grain man visits this city who does not see at a glance the golden opportunity presented. To-day there is hardly a flour-mill in the southwest, under proper management, that is not making money. The two small mills we already have here are paying good profits to their owners, but these small mills have no such advantages as would fall to a mill turning out 1,000 barrels a day and furnishing the transportation lines such a business as would enable them to command favorable rates. A big mill can pay good dividends at a low profit per barrel; it always has the pick of the best wheat and can always find wheat enough to keep it running, for a big mill makes a market at home for the best milling wheat.

And here is a point that should be well considered. A 1,000-barrel mill in Kansas City would have a greater influence in building up our grain market than all other agencies combined. Wheat that now goes around us to other markets would stop here, where it would command a better price at the mill than could be obtained elsewhere, and a large milling business would have the effect of keeping our elevators busy the year round, the same as at St. Louis and Minneapolis.

"Not more than half the wheat that goes to Minneapolis is ground there, but its big mills have made a great wheat market of an inland town, and a vast amount of grain passes through there to the East by rail, in spite of the competition of Duluth, with her massive elevators and cheap facilities for transportation by water. Fuel is cheap and abundant. Flour can be manufactured here at a cost per barrel of 2 cents for coal. Our transportation facilities are equal to those of Minneapolis, and we are 500 miles nearer the southern market, which it tries to reach. With river transportation, now assured, we can ship flour to Memphis, New Orleans and intermediate points at rates as advantageous as those commanded by the St. Louis mills, while being able to buy our wheat at a lower price and coal for manufacturing at about 20 per cent. less. A big mill here would operate as a powerful factor in reviving freight traffic on the Missouri. Nothing but the packing business could equal it in that respect. We are bound to have cheap transportation, and when that is afforded us a mighty impetus will be given to all branches of trade and industry. All Kansas City will need then to reach the markets of the entire world will be the completion of the Nicaragua canal, and this will be achieved within probably the next three years. Then we can load barges at our wharves with wheat and flour, send them down the Missouri and Mississippi to New Orleans, transfer the cargoes to ocean steamers and forward to any port of the globe.

"Memphis and New Orleans will take all the flour that our 1,000-barrel mill could furnish above the amount needed for the local trade, but if more mills should be built, and we may be quite sure of that, we would have an outlet for our wheat and flour at cheap rates of transportation to Cuba, South America and other countries. I will not trespass farther upon your space except to remind the capitalist that we have here a community, on both sides of the Kaw, of over 200,000 people, whose consumptive powers are not to be despised. A big mill would command almost from the start a large home trade, for such a mill would soon drive out competition, and we would not then hear so much about Minneapolis patents at our brokers' shops and provision stores. Kansas this year produced the finest crop of wheat in the world, and will continue to produce just such wheat, and there will never be any need of looking to other points for choice brands of flour."

THE SITUATION IN WHEAT.

According to one crop and market contributor to a St. Louis paper, the wheat position is not strong statistically or any other way. This writer says: "The price-lever is now thrown into the hands of England, whose merchants and millers are able to sit still while India, Russia and the United States cut one another's throats by underbidding each other, and in addition the competition of Australia, Chili and the Argentine Republic has now to be contended with. At the close of last season the stock of wheat in this country, visible and invisible, according to the best information obtainable, was not over 35,000,000 bushels. Assuming the crop of the present year at 480,000,000 bushels, we have here 515,000,000 for all the requirements of bread, seed, export and reserve. The exports from the crop of 1888 in wheat and flour were equivalent to 90,000,000 bushels of wheat. For the five months already passed of the current crop year exports of wheat and flour together have amounted to about 42,000,000, against 47,000,000 bushels for the corresponding time of the year before, or a deficiency in the comparison made of about 11 per cent. If the same proportionate decrease is kept up until the close of the current crop year, 83,000,000 will meet the requirements of the foreign demand.

A close calculation of our food requirements places the quantity at 290,000,000 bushels, and for seed and manufactures at 67,000,000 bushels, which, being deducted from 515,000,000, the sum of our entire stocks at the beginning of the cereal year, leaves 158,000,000 bushels for export and reserve. Now if 83,000,000 bushels 'fills the bill' for the foreign demand, 75,000,000 bushels will remain in reserve at the close of the season, against 35,000,000 at the corresponding period of the preceding year. The reserve then was abnormally low, but should not the foreign calculation 'pan out,' 25,000,000 bushels more than the present rate of exportation can be spared to feed Europe and still leave a reserve of 56,000,000 bushels, which may be considered a normal quantity for farmers' stocks and visible supply at end of cereal year."

THE Brooklyn Bridge is in a flourishing condition. During the year ending December 1 it carried 33,953,773 railroad passengers and 3,195,687 foot passengers; total 37,150,460. The total receipts were \$1,120,024, but owing to purchases of real estate and extensions there is a deficiency of about \$150,000, which is covered by the balance in hand from the previous year. Two vessels lost their topmasts while passing beneath the bridge.

BOOKS AND PAMPHLETS.

The December number of the Travelers' Ready-Reference Guide—*The Red Guide*—contains the new time-tables put in effect in the general change in November, and also a descriptive Winter Tourist Guide with a colored map of Florida. Published monthly by the Knickerbocker Guide Company, 46 Bond Street, New York—25 cents.

The Christmas number of *Good Housekeeping* is charmingly seasonable as usual and the contents, if possible, more than ever attractive and useful. The first page is filled with an illustrated poem, "At Christmastide," by Mary Clark Huntington. For a great many people the leading attraction of the number will be found in the paper by Edward Bellamy on "Household Service Reform," and the portrait of Mr. Bellamy, with a sketch of his life and literary career. These articles are of pertinent interest just now, and Mr. Bellamy's suggestions on this topic ought to bear immediate fruit. There are several excellent Christmas stories in the number, and Christmas literature of various sorts, practical and entertaining.

CATARRH.

CATARRHAL DEAFNESS—HAY FEVER.

A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.

SPECIAL NOTICES.

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Do not order your cloth until you have conferred with us. It will pay you, both in point of quality and price. We are prepared with special facilities for this work. Write us before you order.

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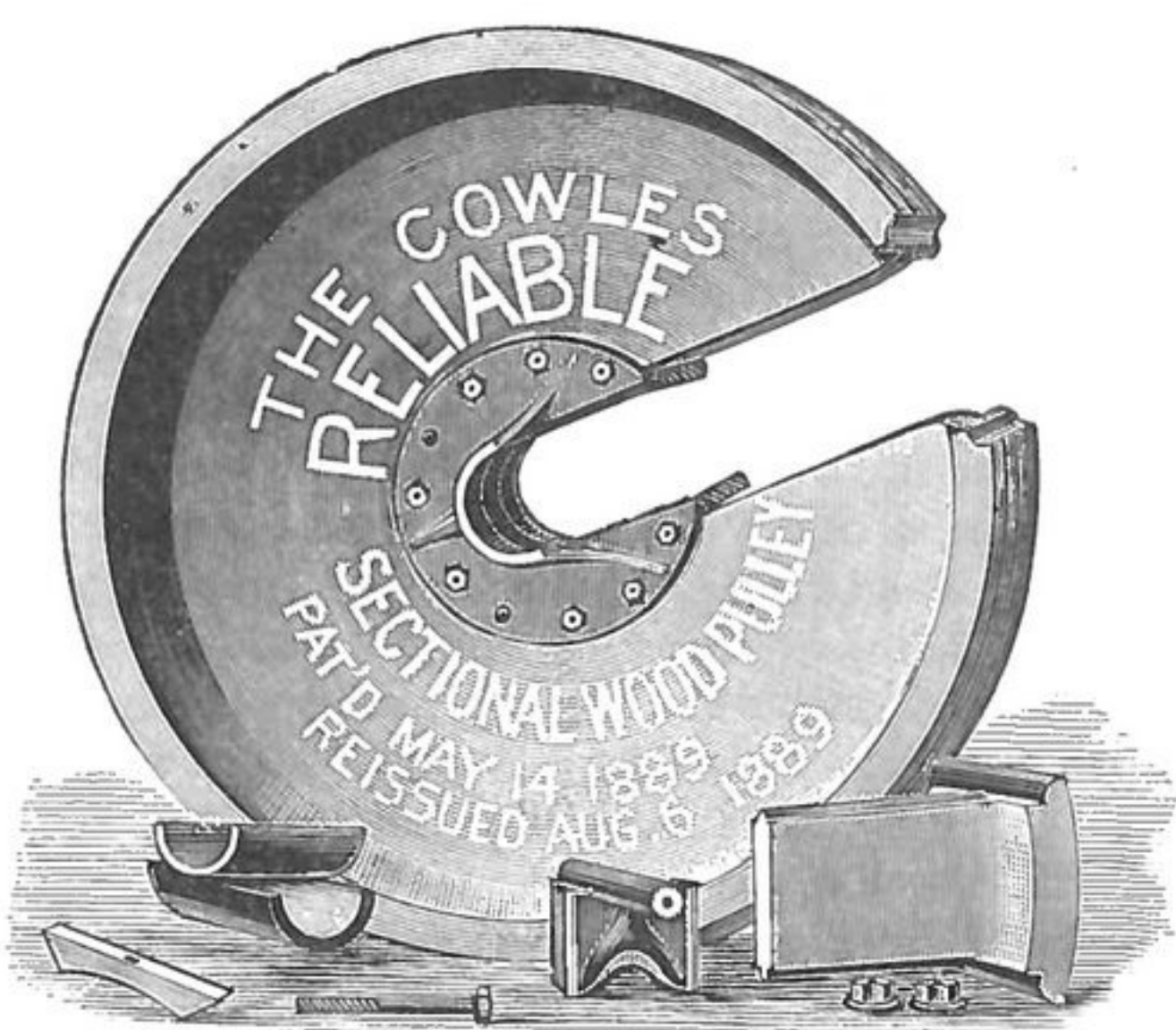
Made of the best double-refined English cast steel. All work guaranteed. For terms and warranty, address, GEO. W. HEARTLEY, No. 297 St. Clair Street, Toledo, Ohio. Send for Circular.

N. B.—All Mill Picks ground and ready for use (both old and new) before leaving the shop. No time and money lost grinding rough and newly dressed Picks. All come to hand ready for use.

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EDWARD GERMAIN, SOLE MANUFACTURER, SAGINAW, MICH., U.S.A.



SULPHURIC ETHER USED AS A MOTOR.--M. de Susini, a Corsican doctor, has constructed a motive apparatus or propeller of 20 horse-power, which is worked by sulphuric ether, a result which the doctor anticipates will realize a saving of 65 per cent. of the combustible material at present employed for setting machinery in motion.

GENERAL NOTES.

THE standard in Japan is gold, and the gold yen is intended to be par with our gold dollar. Silver, however, is the main metallic currency, and the silver yen in circulation is worth about 75 cents, intrinsically, or 5 per cent. more than our silver dollar.

CROP REPORTS BY CONSULS.

Secretary of Agriculture Rusk is planning to secure an extensive and instructive series of reports on foreign grain and other crops through the United States Consuls in various foreign countries. He is taking advantage of an Act passed by Congress in June, 1888, requiring Consuls to procure and transmit to the State Department, for the use of the Agricultural Department, "monthly reports relative to the character, condition and prospective yields of the agricultural and horticultural industries and other fruiteries of the country in which they are respectively stationed." This Act seems to have been overlooked until early last summer, when a circular was sent out to the Consuls calling attention to its provisions and requesting them to transmit the monthly bulletins called for. These have been coming in for some time, but the information has been so fragmentary in its character that further steps have seemed to be required, and the State Department has just transmitted to the Consuls a supplementary circular, enclosing a letter from Secretary Rusk, of the Department of Agriculture, giving an outline of the sort of information required. Secretary Rusk says: "The agricultural productions of the different districts from which these reports are received are so varied that it would be impossible to frame a set of questions or map out a definite line of inquiry under which all could report. I would suggest the following points as the most important for the inquiries of the different seasons of the year: 1. Area of each principal crop and per cent. of increase or decrease from previous years. 2. Condition of each principal growing crop, on the basis of full normal conditions, showing the estimated disability or loss from imperfect germination, floods, droughts, insect depredations or other causes. 3. After harvest, the estimated average yield per acre in pounds, bushels, tons or other denominations. 4. Quality of the crop, on the basis of normal quality free from all impairments. 5. Final report of estimated product in the aggregate, in the denominations of the country. 6. After harvest, the average prices of each principal crop. 7.

Any tendencies to change of agricultural methods, of implements, or of crop distribution. Consuls situated in districts producing cereals, meats or other products entering into competition with the American production should take especial pains to inform themselves of the probable product of these competing crops. It would be desirable especially to note any tendency to marked or sudden changes in crop distribution, the introduction of new products, or other abnormal movements in rural exploration."

IS NOT THIS REAL POETRY?

THE CITY EDITOR'S LONGINGS.

I would flee from the city's rule, from its fashions and forms cut loose, and go where the strawberry grows on its straw, and the gooseberry grows on its goose; where the catnip tree is climbed by the cat as she clutches for her prey, the guideless and unsuspecting rat on the rattan bush at play; I will catch at ease the saffron cow and the cowlet in their glee, as they leap in joy from bough to bough on the top of a cowslip tree; and list while the partridge drums his drum and the woodchuck chucks his wood, and the dogwood devours the dogwood plum in the primitive solitude. O let me drink from the moss-grown pump that was hewed from the pumpkin tree! Eat mush and milk from a rural stump, from fashion and folly free, new gathered mush from the mushroom vine, and milk from the milkweed sweet, with pineapple from the pine. And then to the whitewashed dairy I'll turn, where the dairy maid hastening hies, her ruddy and golden red butter to churn from the milk of her butterflies. And I'll rise at morn with the earliest bird, to the fragrant farm-yard pass, and watch while the farmer turns his herd of grasshoppers out to grass.

THE importation into France of bread baked beyond her frontiers still continues to increase. In 1887 the returns of such importation showed rather more than 4,500,000 kilos. (the kilo. is, roughly, 2½ lbs.), in 1888 the figures had risen to 12,691,000 kilos., and the first nine months of 1889 registered nearly 21,000,000 kilos., so that at this rate of increase it is not unreasonable to suppose that by the completion of 1889 the importation will have approached 30,000,000 kilos. The explanation of these figures is found in an anomaly of the tariff, which admits bread at a duty of 1 franc 20 centimes per 100 kilos., and imposes a tax of 8 francs upon the same weight of flour.

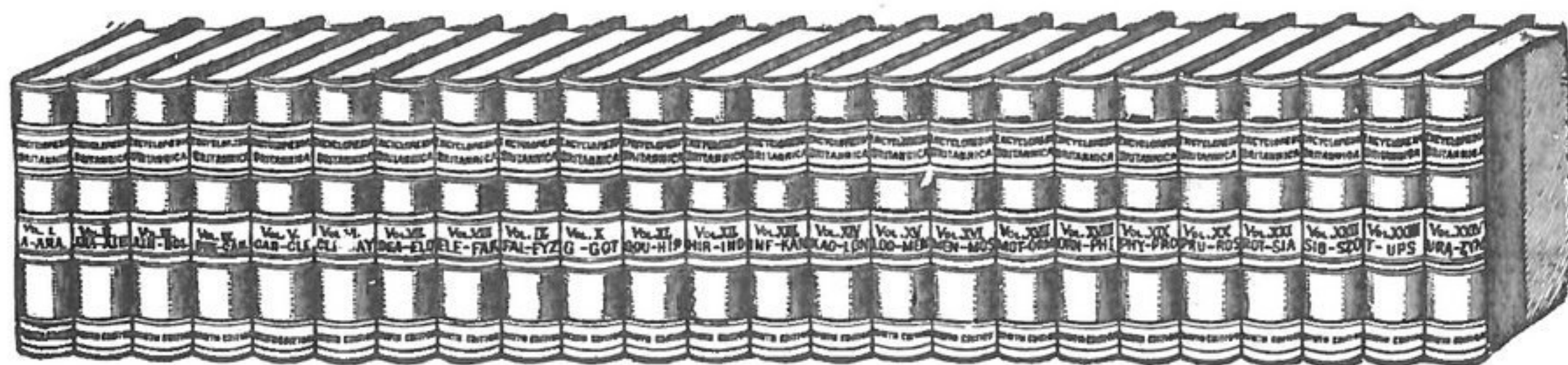
A NEW METHOD OF TREATING DISEASE.

HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.

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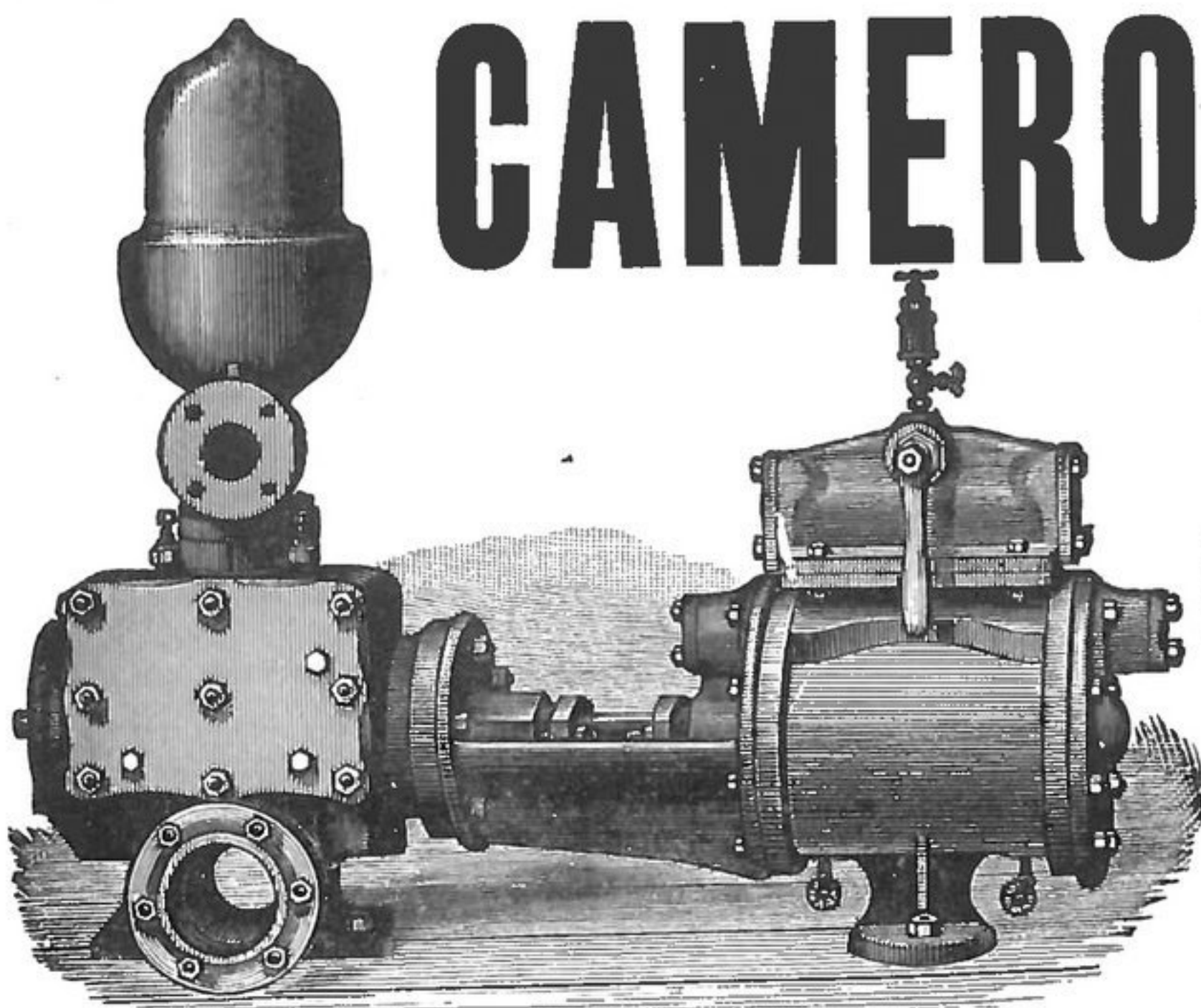
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San Francisco,	21, 23 Fremont Street,	Parke & Lacy Co.
Portland, Or.	33, 35 N. Front St.	Parke & Lacy Mch. Co.
Charlotte, N. C.	36 College St.	The D. A. Tompkins Co.
Atlanta, Ga.	45 S. Prior St.	
Dallas, Tex.		Keating Imp. & Machine Co.
Chattanooga, Tenn.,		G. E. James & Co.

**CAMERON STEAM PUMP**

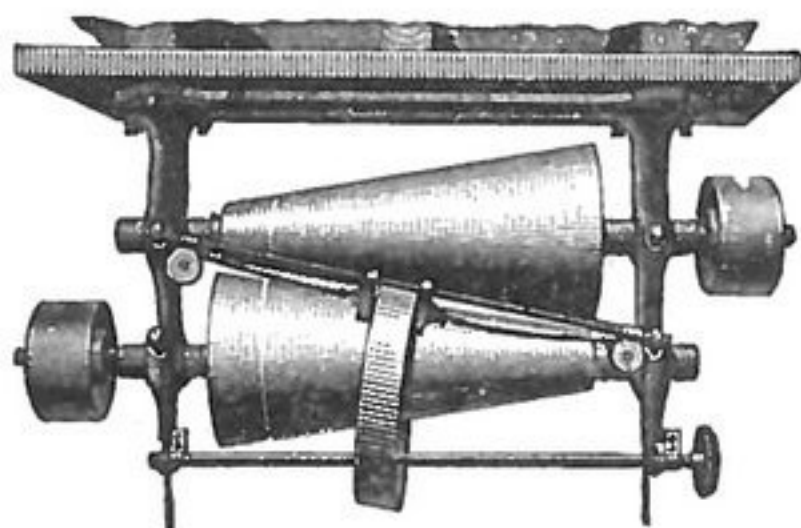
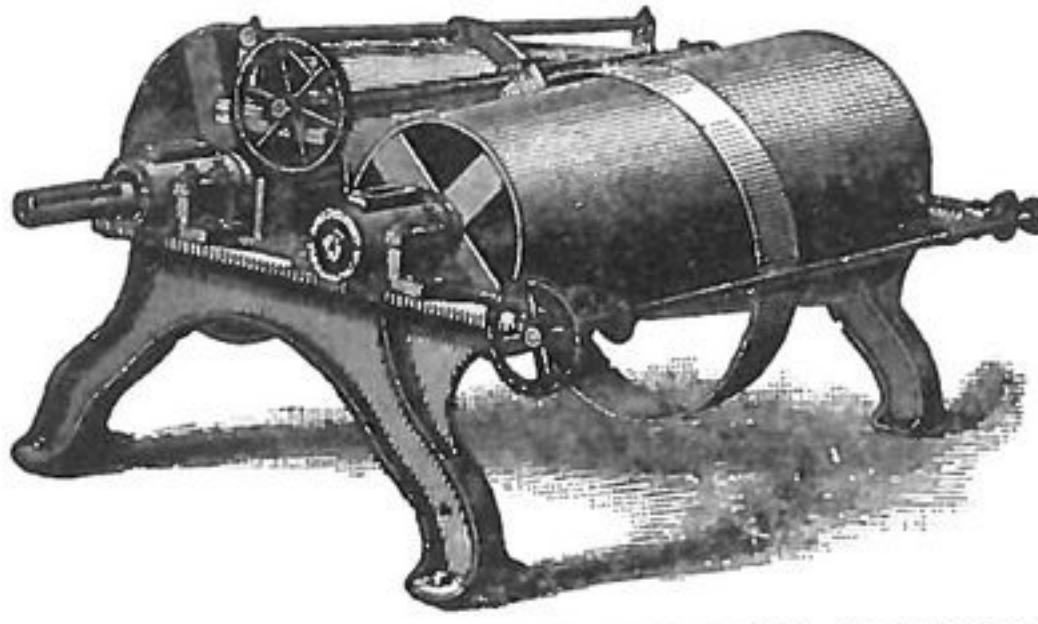
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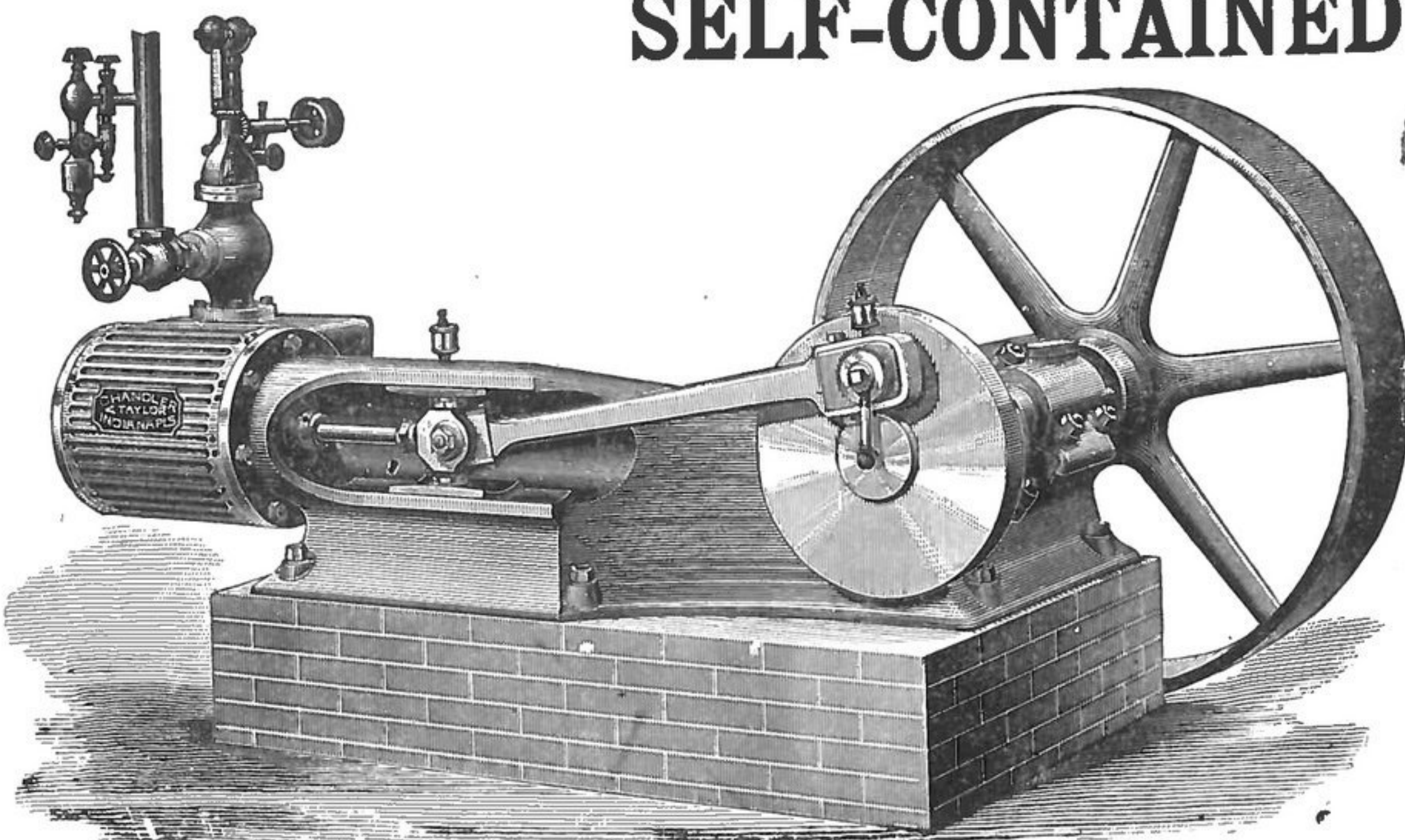
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THE EVANS FRICTION CONE & FRICTIONAL GEARING**"PATENTED."**This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is fluctuating. All sizes made from 1/2 Horse Power to 50 Horse Power. **SEND FOR ILLUSTRATED CATALOGUE.****EVANS FRICTION CONE CO., 85 Water St., BOSTON.**

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CATALOGUE NO. 32.****Chandler & Taylor Co.****Indianapolis, Ind.**Engines, Saw-Mills and Drain Tile
Machinery a Specialty.

NOTES & NEWS

Santa Ana, Tex., project a roller mill.
 H. Stokes, miller, Stafford, Md., failed.
 I. Kulp, miller, Perkiomen, Pa., assigned.
 I. Kulp, miller, Schwencksville, Pa., assigned.
 Eisenmayer & Co., millers, San Diego, Cal., discontinued.
 Hammer & Teague, High Point, N. C., build a grist-mill.
 The Allen & Nelson Mill Co., Seattle, Wash., incorporated.
 The Pacolet, S. C., Mfg. Co.'s grist-mill burned; loss \$3,000.
 A. K. Easter, St. Michaels, Md., remodels his flouring-mill to rolls.
 A. G. Gooch & Sons, Russellville, Ky., will operate a new grist-mill.
 R. E. Park, Macon, Ga., will probably build a grist-mill at Holton, Ga.
 The Laredo, Tex., Cotton Gin & Milling Co. are building a grist-mill and gin.
 W. C. Layman & Co., miller, Latah, Wash., dissolved, A. W. Wheeler retiring.
 J. Adams and others, Allensville, Ky., will build a large roller flouring-mill soon.
 Jas. S. Smith's grist-mill, Jackson, Tenn., burned with other property; loss \$3,000.
 L. Maulfair & Co., miller, Columbia, Pa., are succeeded by the Columbia Milling Co.
 Blevins & Craven, Dardanelle, Ark., want machinery for a corn and flouring mill.
 Tazewell, Tenn., men are forming a stock company to build a roller flouring-mill.
 Wood & Co., Covington, Tenn., increase their flouring-mill capacity to 200 barrels a day.
 The Board of Trade, Beaumont, Tex., will give information concerning a projected flouring mill.
 E. B. Martin's Reed City Roller Mills, Reed City, Mich., burned; loss \$25,000; insurance \$15,000.
 Lindsey & Robson's large flouring-mill, Humboldt, Kans., burned; loss \$100,000; insurance \$45,000.
 Duluth reports state that British syndicatists have invested \$4,000,000 in Duluth mills and elevators.
 J. R. Thompson, Hillsboro, Tex., is forming a \$20,000 stock company to build a roller flouring-mill.
 J. W. Talbott's flouring-mill, Rising Sun, Ind., burned with the elevator; loss \$35,000; no insurance.
 A. Suter & Bros.' flouring-mill, Woodlands, W. Va., burned; they are rebuilding and want an outfit of machinery.
 Thos. Case's feed-mill, Franklinville, N. Y., burned with other property; loss \$10,000; insurance \$7,000; fire mysterious.
 The Nashville, Tenn., flour mills are reported to be sold to English syndicatists, who are looking for other mills in the same quarter.
 Jas. Snaveley's large flouring-mill, Lexington, Pa., was wrecked by an over-load of grain. The wreck was total. Several hands were injured.
 E. A. Moore, Buena Vista, Va., sold his flouring-mill and other property to John Sheridan and others, who have organized a \$20,000 stock company.
 The Joliet Mfg. Co.'s Works, Joliet, Ill., burned; loss \$35,000; well insured; the company was engaged in the manufacture of corn-shellers, cultivators, corn-planters and barbed wire.
 The first payment of the purchase money for the Pillsbury and other milling interests in Minneapolis was made December 7. One check was for \$700,000 and others brought the total up to over \$1,000,000.
 The Iowa corn crop just raised figures at 336,000,000 bushels. It is worth about \$75,000,000, and would fill a train of cars 500 miles in length. It would give 180 bushels of corn to every inhabitant in Iowa, and 5 bushels to every man, woman and child in the United States.

The Saxton & Thompson 7-story roller flouring-mill, Lockport, N. Y., burned to the ground December 8. The contents were destroyed; total loss about \$250,000; insurance about \$150,000. The fire originated in the top story. The machinery equipment of the mill was renewed in 1884, when the mill was rebuilt, at a cost of \$135,000.

The yield of a single grain of wheat is never less than forty fold under favorable conditions, and when sown thin it should be much greater. Every pound of wheat should produce a bushel in all sections where wheat is successfully raised. In rainy sections the portion of starch in the grain increases three or four per cent. while the gluten decreases in a similar proportion, compared with dry regions like Colorado.

A St. Louis dispatch of December 10 says: The English syndicate that had an option on the ten elevators of the St. Louis United Elevator Company has concluded not to buy. The experts who have examined the property made an adverse report. They found that good profits were made during the years 1886 and 1887, but that \$43,000 losses were sustained last year. Much of the loss, it is said, was due to speculation by the trust, but such a harvest of losses wiped out the Englishmen's interest in the investment.

The December Government crop report places the lowest prices ever known on agricultural produce. The lowest average estimated value of corn in former years was 31.8 cents in 1878; since that date 32.8 in 1885. The average of wheat estimates is 70.6 cents. This is not the lowest, as the average in December, 1884, was 64.5 cents. The average price of oats is lower than ever before reported. In 1878 it was 24.6 cents per bushel; at the present time 23 cents. Prices of barley, rye and buckwheat are also very low. The average value of the potato crop is 42.1 cents. The lowest averages reported were 40 cents, in 1884.

Says the Winnipeg, Manitoba, *Commercial*: The local situation has been characterized by a sharp upward movement in prices, due to competition among leading milling firms. The falling off in deliveries by farmers caused some alarm on the part of millers as to their ability to obtain supplies necessary for the season's grinding. This led to bidding more sharply for the wheat and has resulted in a regular fight for the grain between millers. Millers having buyers at country markets have bid up prices, and they have also been picking up all the cars on track from country buyers that can be got hold of. Grain shippers are practically out of the race, as they can not handle wheat for shipment at the prices paid.

Says the Toronto, Ontario, Canada, *Monetary Times*: Less favorable than its predecessors is the last official report on the 1889 harvest of Ontario. The threshing-machine with its unerring test shows that the September estimate of yield was too high. Spring wheat is now put at 14.3 bushels to the acre, a deduction of 1.3 from the previous estimate. Fall wheat is put down at barely 10 bushels an acre. Rust injuriously affected all the cereals, though straw, such as it is, is plentiful. Oats besides suffering from rust, were greatly injured by excessive moisture on low lands. Rye turned out well; barley was a crop of varying quality, but a good yield. Corn was a good crop; buckwheat various, but on the whole was as good as last year. Beans fair, but not up to the average. Not only cereals, but root crops, suffered from excessive wet early in the season and drought later on. Both turnips and potatoes are small and deficient in bulk.

Chicago *Daily Business* prints the following Kansas City despatch under date of December 10: Such extraordinary demands have been made upon the railroads during the last week to move the crops of the southwest that a car famine is imminent. This morning 700 cars were waiting on the side tracks in this city either to be sent east or unloaded. Both the elevator men and track jobbers are unable to handle their business for lack of accommodation. One cause of this local blockade is claimed to be the delay occasioned by the enforcement of the new grain inspection law. The famine of cars extends throughout Kansas. Complaints are made against all the roads. The railroad men say the car famine is due to the enormous crops, which exceed the carrying capacity of the roads. They all agree that never before has there been such a demand for freight cars and many of the roads have even resorted to boarding up flat and coal cars for the shipment of grain.



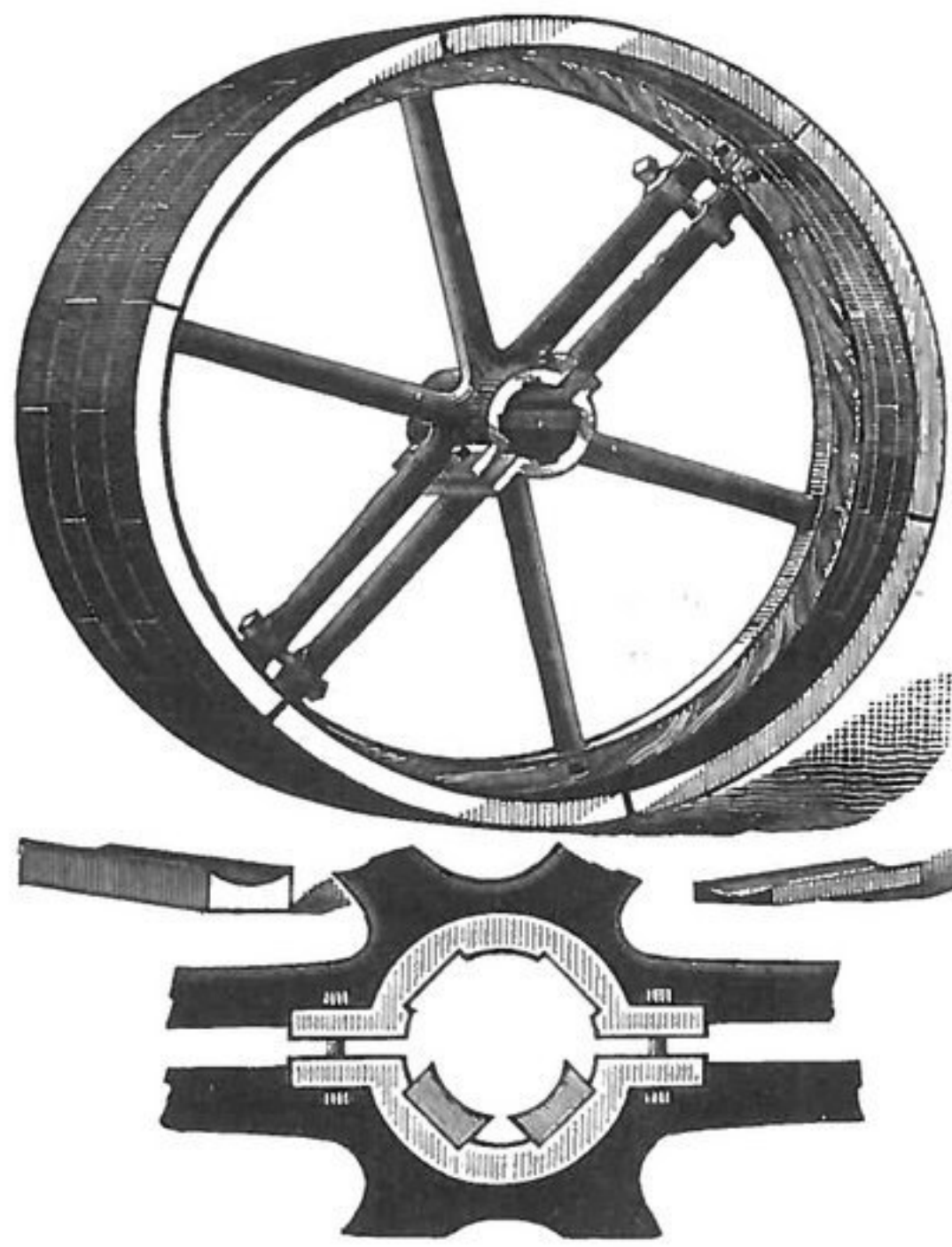
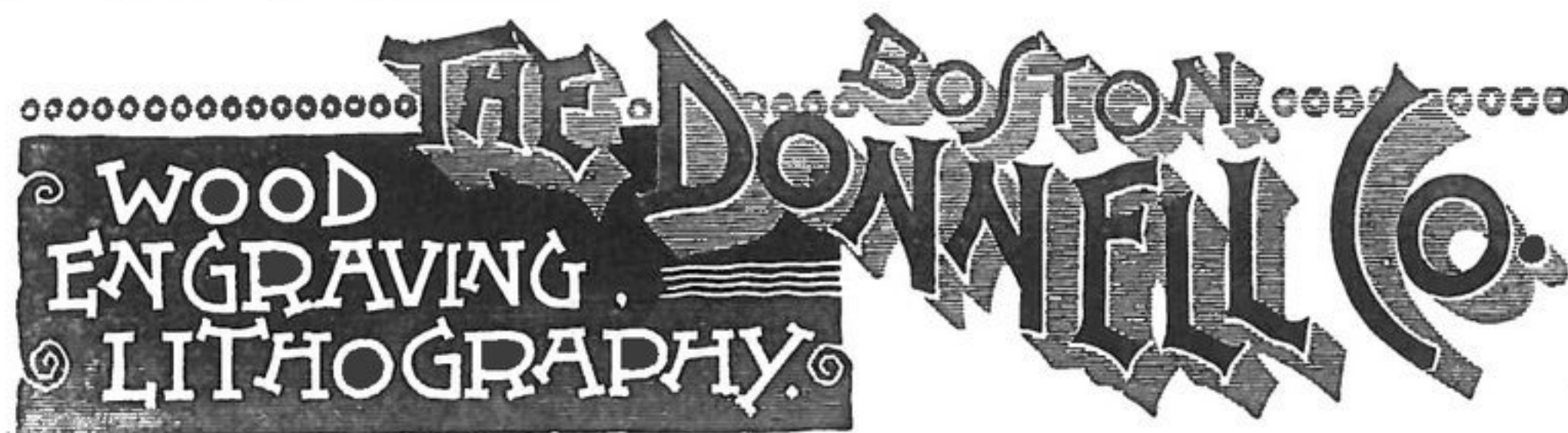
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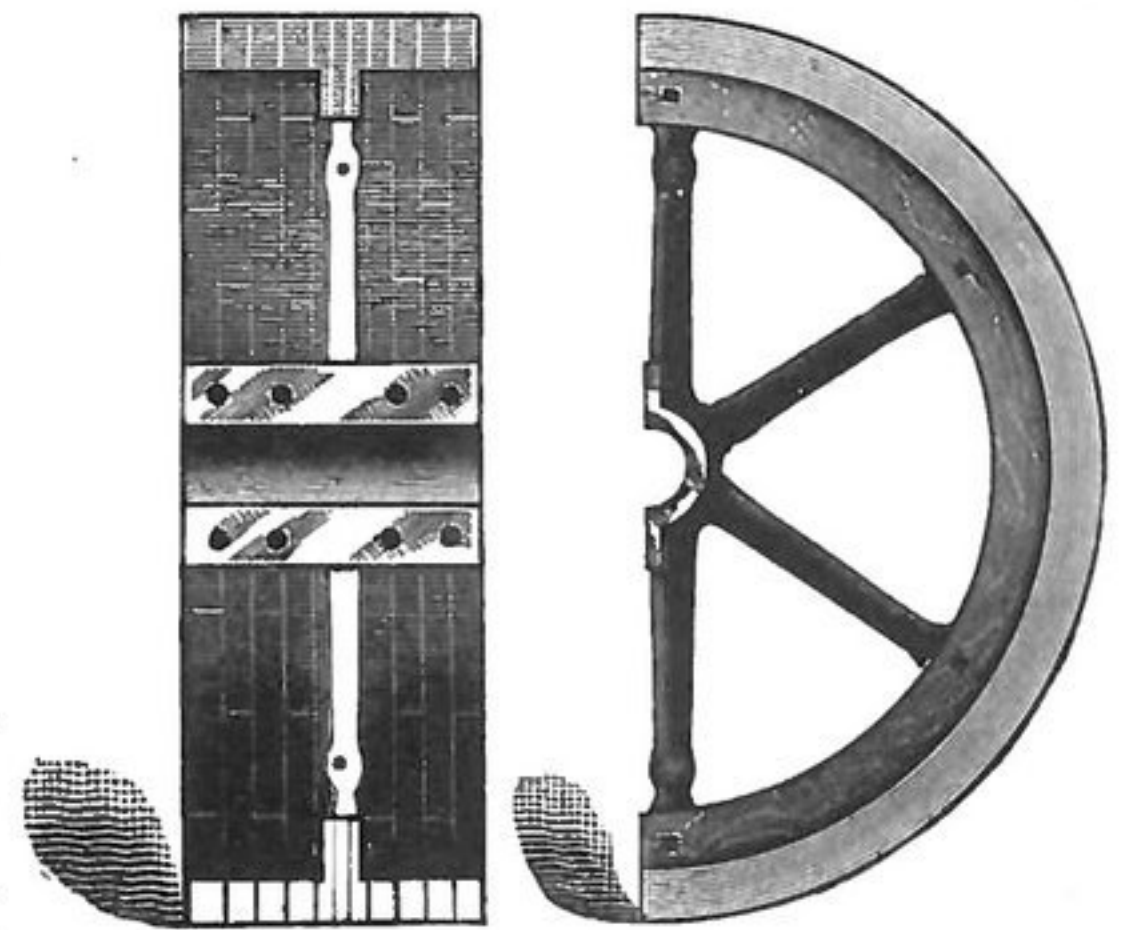
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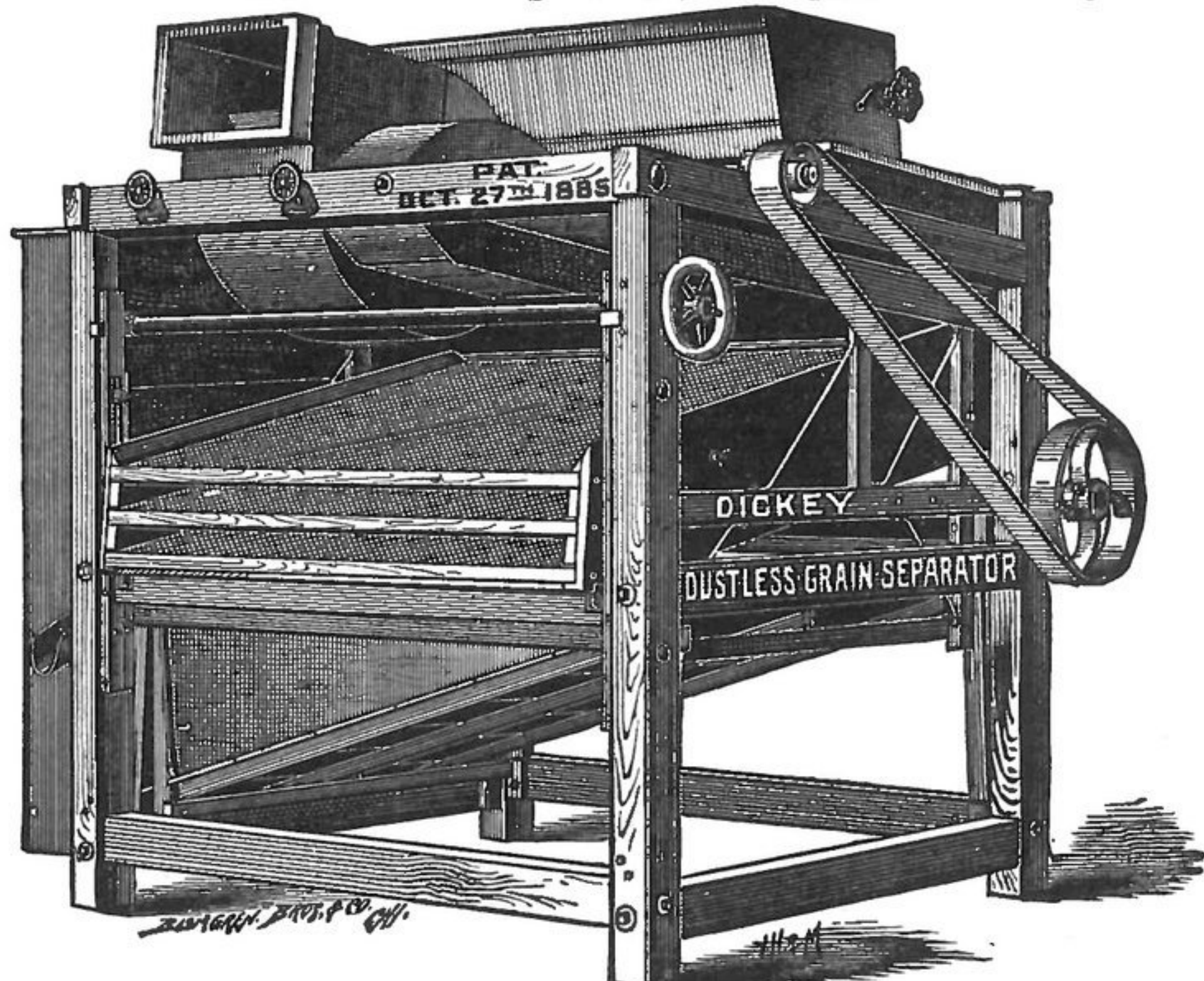
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EUROPEAN ECHOES.

THE wheat crop of Belgium this year is estimated at 18,976,600 bushels on 600,000 acres, against 14,880,000 bushels in 1888 and 19,896,000 bushels in 1887.

THE stocks of flour and wheat in bond in French ports on November 1 were equal to 6,044,736 bushels, against 8,923,136 bushels on November 1, 1888, and 4,111,880 bushels on November 1, 1887.

THE Senate of Finland has recently decreed that the erectors of flour-mills shall be entitled to state loans not exceeding one-half the estimated cost of such mills, the said loans to bear interest at the rate of 3 per cent. and to be repayable within a term of 20 years. By the same decree all milling-machines not made in Finland will, if intended for use in flour-mills, be admitted free of duty from 1889 to 1891.

PROPORTIONAL quantities per head of the population of the undermentioned kinds of agricultural food products imported into the United Kingdom:

	1886.	1887.	1888.
Wheat.....lbs.	145	109	171
Flour....."	45	55	51
Maize....."	95	94	76
Oats and oatmeal....."	42	44	56
Other grain and meal....."	58	64	86
Rice....."	20	15	19
Potatoes....."	8	8	7

THE official report on the crops of Belgium contains the following: The yield of grain in this country is greater than has been expected:

	Acreage of the census of 1880.	Yield per acre.	Total yield.
Wheat.....	671,552	28	18,803,460
Rye.....	686,770	25.5	17,512,630
Barley.....	99,250	35.6	3,533,300
Oats.....	614,230	44.5	27,420,000

Wheat is 10 per cent., rye 9 per cent. and oats 10 per cent. more than the average for the last ten years; barley gave an average crop. The quality of the grain is satisfactory.

FOLLOWING is a table showing the Russian exports of wheat flour during the past four years, together with the destination:

	1888.	1887.	1886.	1885.
	Sacks.	Sacks.	Sacks.	Sacks.
United Kingdom.....	65,667	20,433	9,323	73,637
Turkey.....	195,673	170,473	175,005	162,510
Egypt.....	49,821	61,752	70,558	44,688
Italy.....	9,880	27,951	63,803	81,330
Holland.....	3,508	653	2,678	29,480
Belgium.....	5,055	—	—	16,251
France.....	5,342	948	1,580	13,056
Sundries.....	10,343	8,044	13,728	28,076
Total.....	345,289	289,254	336,675	449,028
Through the Asiatic Frontier..	53,544	82,155	24,831	24,529
Through Finland.....	135,570	122,993	129,170	128,941
Total.....	534,403	494,402	490,676	602,498

THE Paris, France, "Fermier" of November 16 says: Offers of wheat on the provincial Grain Exchanges are not perceptibly augmenting, in spite of the time when the rentals have to be met, a fact which seems to indicate a very great resistance on the part of growers to sell at actual currencies. Wheat to-day has fallen to a really low price, and when it is considered that in the Paris districts, as well as in many other places, excellent wheat can be obtained at 38s. 3d. per 480 pounds, and even under, it is well understood farmers are uniting all their efforts to prove themselves victors in the unequal struggle in which they are now engaged. The continual depreciation of prices would inevitably lead us to believe that the duty of 5 francs is insufficient to protect our interests, and we ask, not without some alarm, what would have happened if this impost had not been the means of re-

straining the importation of foreign wheat. In America at the present time the best wheat is quoted at the shipping port at 27s., which implies the purchase price of about 25s. 3d., and the reselling rate at the quay at Havre is 32s. 2d at 33s. 1d. Under these conditions it is incontestible that in the absence of any duty an unprecedented disaster might have been produced. Farmers, in fact, after the successive losses to which they have been subjected, would have been unable to confront such a competition. Although perhaps inadequately protected, we ought at least to be so far satisfied, for owing to the support of the present import duty it may be expected that the decline will not become more accentuated, and the reasons which led us to think so are numerous. In the first place it is to be noted that the imports of wheat have decreased considerably, and that for a fortnight they have been almost nothing. Russia is the only country which is sending wheat to Marseilles, but the bulk is destined for Switzerland, so that on that side we should set ourselves wholly at rest. The imports being suspended, the near future presents itself under the most favorable auspices. There is noted on the other hand, and especially in America, a very strong desire to reconstitute stocks, the reason for which is explained, and very plausibly, too, by their present scarcity and the very low prices now practicable. This inclination being soon transformed into a reality, a slight improvement will result in quotations, of which we should be the first to avail ourselves, as farmers would then be masters of situation in the absence of all competition.

SAYS the London "Miller" of November 25: The export-scale of flour from America keeps large, nor is the price beyond that which sharply competes with London and country-made household sorts. The present promise is that the exports from the United States will rather increase than otherwise, and thus the British miller is not likely to buy wheat freely. Rather he will choose samples that are cheap and good for mixing, and he will avail himself of foreign receipts that are suitable for his purpose and which are cheaper than he can make them. At the same time, the competition and prices of English-made and foreign-made flour are so close that English millers can fairly hold their own in many cases, although they may not be able to raise value as they might do if the American competitor was absent. Outside the United States there are no competitive millers, for the Hungarian flour is supplemental, not underselling the home supply. The growing French wheat is reported very thriving and forward, so that the cold weather (colder than in England) has been welcomed for checking growth. * * * * France is importing at the rate of nearly 4,000,000 quarters of wheat per annum, although the crop was good. The southern ports always take an important bulk for home consumption and transport to Switzerland. Prices keep steady. Mid-Europe is exporting more than expected by way of German ports and Trieste. While rye and inferior wheat are largely wanted, owners of good German wheat and makers of best Austria-Hungarian flour can always spare some supplies. * * * * Russia has gone on forwarding freely, knowing that the mild Gulf Stream does not come to her harbors, which must soon be closed by frost. Sellers, however, have not accepted lower rates for the large quantities sold, costs and freights compelling full terms to be realized. Reading these sentences, one might think, as farmers are freely delivering and America and Russia are freely exporting, then surely our future supplies must be well assured! But the fact is the immediate outlook is not much on the side of wheat buyers. Last year there was on passage the quantity of 2,635,000 quarters wheat and flour, this season there are but 1,669,500 quarters, a great disparity, chiefly in white wheat from California. Accordingly, if Saturday's telegrams of severe frost in south-east Europe be forerunners of the stoppage of Russian navigation, the prospect of supplies for the next two or three months are not good, but later on the Australian shipments should be of very timely service to English millers, making them less dependent on Russian and American sources, especially for the best qualities of flour.

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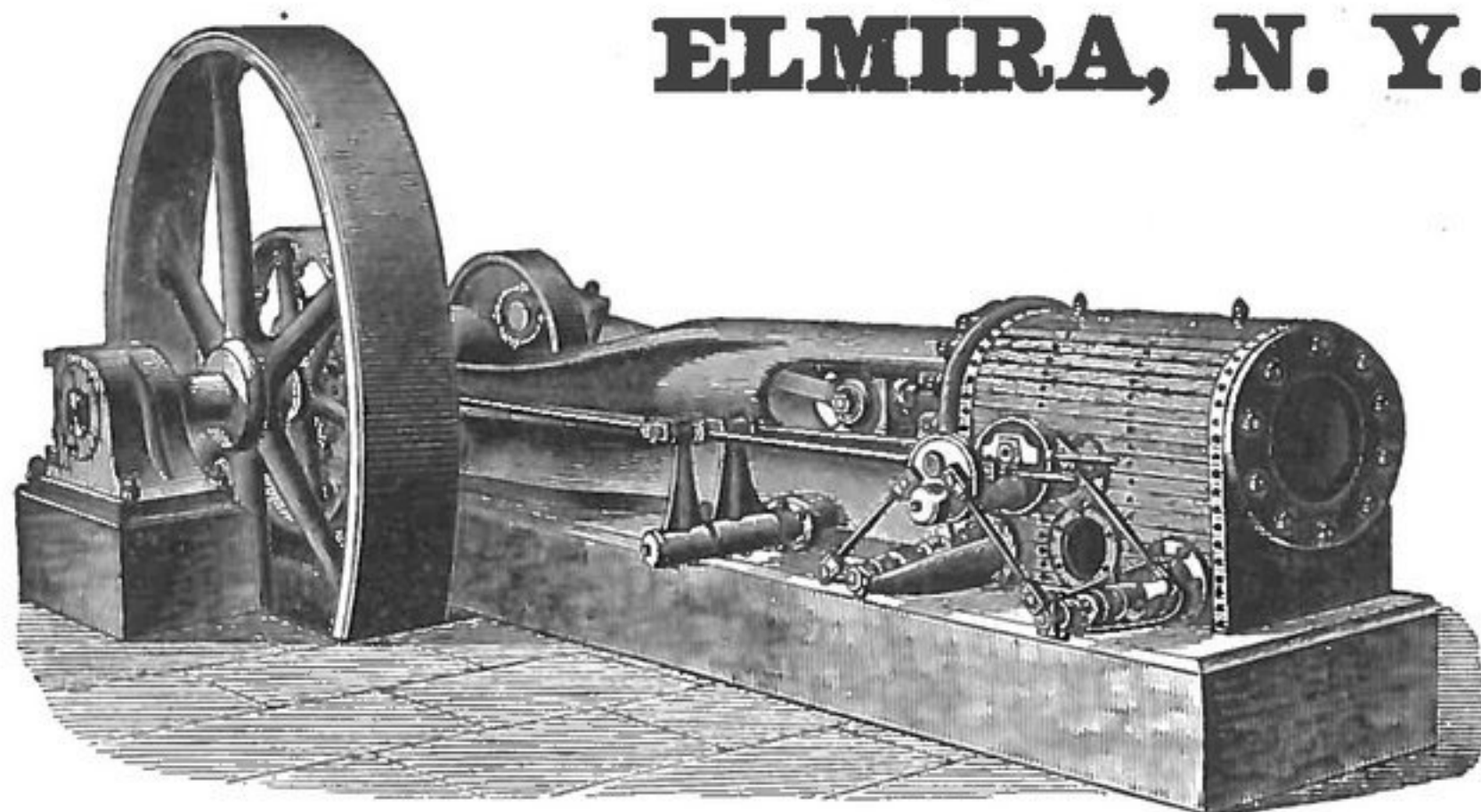
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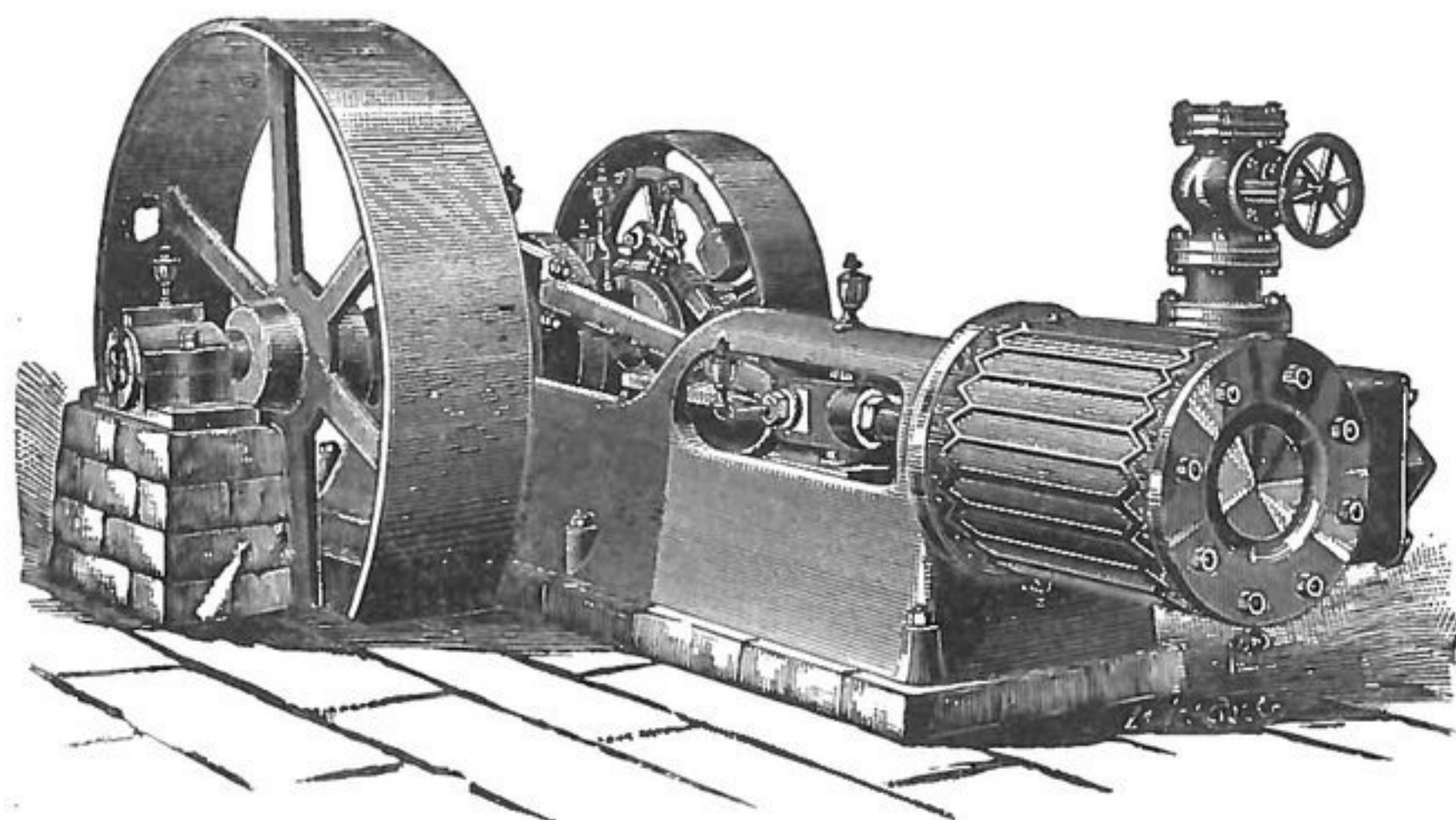
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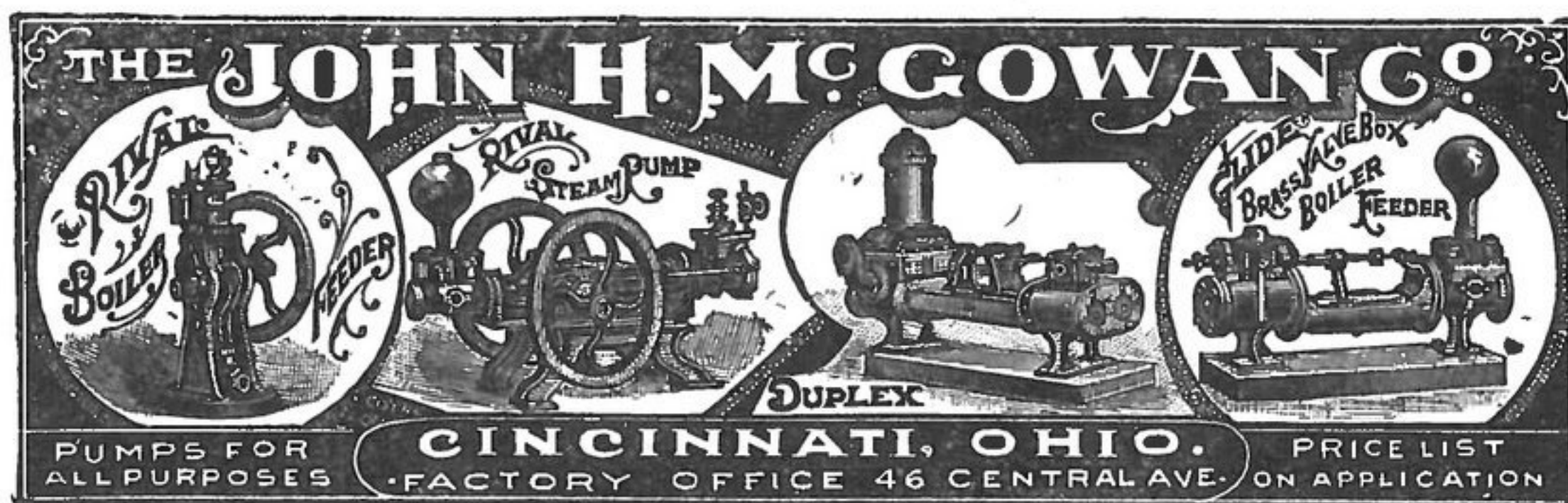
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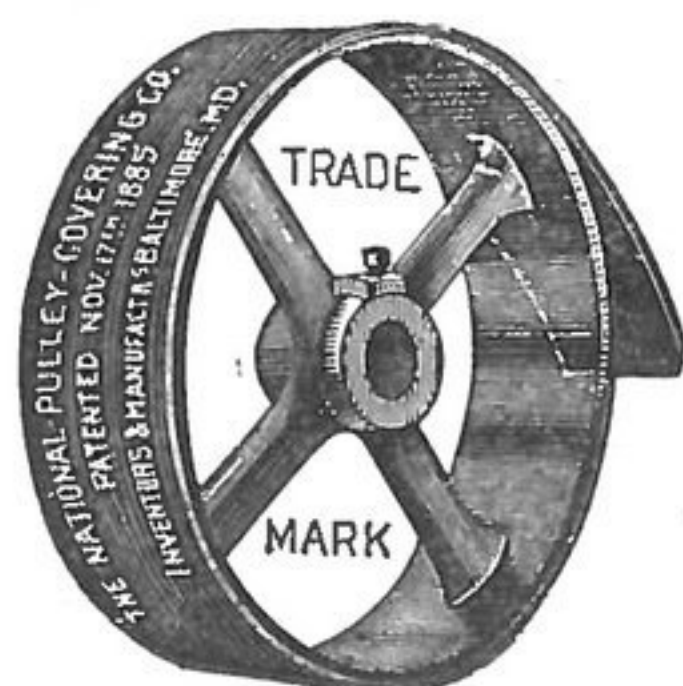


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OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., Dec. 14, 1889.

Friday of last week was a day of irregular markets. In New York December wheat closed at 84½c., with Atlantic port receipts 92,289, exports 19,563, and options 1,400,000 bushels. December corn closed at 42¾c., with receipts 116,628, exports 262,520, and options 900,000 bushels. December oats closed at 28¾c., with receipts 80,763, exports 21,268, and options 250,000 bushels. Wheat flour was dull and featureless, but steady with receipts 14,060 sacks and 32,251 barrels, and exports 44,931 sacks and 18,867 barrels. The minor lines were without special features.

Saturday brought less active markets, with export trade checked by a want of freight room. December wheat closed at 84c., with receipts 75,769, exports 36,020, and options 1,768,000 bushels. December corn closed at 42¾c., with receipts 94,089, exports 186,628, and options 352,000 bushels. December oats closed at 29c., with receipts 157,734, exports 8,376, and options 360,000 bushels. Wheat flour was dull and slow, with receipts 17,831 sacks and 31,147 barrels, and exports 650 sacks and 3,353 barrels. The other lines were featureless.

Monday brought lower and realizing markets. December wheat closed at 83¾c., with Atlantic port receipts 73,567, exports 70,072, and options 3,200,000 bushels. Interior spring wheat receipts for the day were 610,000, and winter receipts 114,000 bushels, and the total seaboard receipts were 798,000 bushels. December corn closed at 42¾c., with receipts 196,000, exports 264,298, and options 616,000 bushels. December oats closed at 28¾c., with receipts 234,517, exports 77,114, and options 300,000 bushels. Wheat flour was dull and unchanged, with only a hand-to-mouth trade and buyers and sellers 10@15c. apart. Receipts 35,187 sacks and 41,749 barrels, and exports 9,943 sacks and 24,888 barrels. One prominent German shipper in New York said that he had cable orders from Stettin, Hamburg, Bremen, Amsterdam, Rotterdam, Antwerp and the Northern Baltic ports for American rye, few of which he was able to fill for want of ocean freights to suit; that the stock of rye in Berlin is not half that of last year, while all the State, Western and Canada offered in New York has already been taken; while the deficit in the German crop has only begun to be felt till the Baltic is closed, when the German Government must have it for the "black bread" used in the army, which can not be changed for wheat. The other lines were unchanged.

Tuesday brought higher markets on lighter receipts, bad weather and poor grading in the West. December wheat closed at 84¾c., with Atlantic port receipts 95,042, exports 136,219, and options 2,500,000 bushels. December corn closed at 42¾c., with receipts 191,237, exports 202,956, and options 300,000 bushels. December oats closed at 28¾c., with receipts 130,364, exports 23,460, and options 324,000 bushels. Wheat flour was irregular and in buyers' favor, except on bakers' extras or spring clears and some other lines. The receipts included 21,271 sacks and 35,958 barrels, and the exports were 27,897 sacks and 8,022 barrels. All the minor lines were featureless. All the cables on breadstuffs were dull.

The following shows the amount of wheat and flour, together with the amount of corn on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1889.	1888.
	Dec. 10.	Dec. 11.
Wheat and flour, qrs....	1,996,000	2,397,000
Corn, qrs.....	404,000	203,000

The following shows the amount of wheat

and corn on passage to the Continent for the past week and for the same week last year:

	1889.	1888.
	Dec. 10.	Dec. 11.
Wheat, qrs.....	386,000	622,000
Corn, qrs.....	188,000	66,000

	Qrs.
Shipments India wheat to U. K.....	52,500
do do Continent..	10,000

The imports into the United Kingdom for the past week and for the same weeks in previous years were as follows:

	1889.	1888.	1887.
	Dec. 10.	Dec. 11.	Dec. 13.
Wheat, qrs.....	291,000	289,000	246,000
Corn, qrs.....	94,000	67,000	107,000
Flour, bbls.....	160,000	118,000	141,000

Wednesday was a day of steady and slightly changed markets, and there were no new features visible in any line. December wheat closed at 84¾c., with receipts 67,374, exports 63,067, and options 1,200,000 bushels. The Government crop report had absolutely no effect upon the markets. December corn closed at 42¾c., with receipts 257,563, exports 43,204, and options 360,000 bushels. December oats closed at 29c., in spite of the shipment of 400,000 bushels out of Buffalo, with receipts 96,592, exports 63,505, and options 300,000 bushels. Buckwheat grain was slack at 36@46c. Rye grain was nominally firm, but dull, at 60@62c. for No. 2 Western, 63c. for No. 1 Western, and 63@64c. for State No. 1 and Canada. Barley was neglected at the following figures: Two-rowed 53c.; six-rowed 56@58c.; No. 2 Canada 58c.; extra No. 2 do 60c. Malt was neglected and offered at old quotations, without demand. Quoted: Country-made old 79@85c.; new do 80@85c.; two-rowed State old 67½@72½c.; new do 70@75c.; six-rowed old 67½@75c.; new do 75@80c.; Western old 45@72½c.; new do 55@80c. Mill feed was dull and barely steady. Quoted: 60@62½c. for 40, 60 and 80 lbs., and at 75@80c. for 100 lbs.; 70@72½c. for rye.

Wheat flour was neglected on spot at easier prices in New York, with Western mills holding steady to arrive. Exporters reported European markets glutted with consignments of flour from Western mills. Atlantic port receipts included 41,159 sacks and 33,451 barrels, and exports 3,450 sacks and 7,145 barrels. The quotations were as follows:

SPRING FLOUR.		
	Sacks.	Barrels.
No grade.....	\$1.50@1.60	\$....@...
Fine.....	1.80@2.05	1.95@2.20
Superfine.....	2.05@2.30	2.30@2.65
Extra No. 2.....	2.30@2.60	2.55@2.85
Extra No. 1.....	3.00@3.20	3.25@3.75
Clear.....	3.05@3.35	3.40@3.50
Straight.....	3.80@4.20	4.15@4.70
Patent.....	4.60@4.80	4.75@5.15

WINTER FLOUR.		
	Sacks.	Barrels.
No grade.....	\$1.45@1.70	\$....@....
Fine.....	1.90@2.20	2.00@2.30
Superfine.....	2.25@2.45	2.25@2.50
Extra No. 2.....	2.40@2.70	2.50@2.80
Extra No. 1.....	2.70@3.70	2.85@3.75
Clear.....	3.25@3.60	3.85@4.00
Straight.....	3.85@3.90	3.95@4.30
Patent.....	4.10@4.30	4.35@4.80

CITY MILLS.		
W. I. grades.....		4.25@4.35
Low grades.....		2.40@2.50
Patents.....		4.90@5.50

Rye flour was firm at \$3.35@3.50 for standard to choice brands, and \$3.25 for common superfine. Buckwheat flour was quiet at \$1.50 for old and \$1.60@1.80 for new. Corn products were quiet at the following rates: 82@83c for coarse meal, 95@97c for fine yellow and white, city make; 80@81.00 for Western and Southern, \$2.65 for Brandywine, and \$2.50@2.60 for Western and Southern in bbls.

Thursday brought no important changes in the market conditions. December wheat in New York closed at 84½c., with receipts 21,450, exports 136,226, spot sales 24,000, and options

2,120,000 bushels. December corn closed at 42¾c., with receipts 48,800, exports 109,247, spot sales 59,000, and options 592,000 bushels. December oats closed at 28¾c., with receipts 175,000, spot sales 67,000, and options 550,000 bushels. Wheat flour was fairly active and heavier, with receipts 22,676 packages, and sales 24,500. The sales included the following prices: Low extras \$2.35@2.85; city mills \$4.30@4.35; city mills patents \$4.65@5.40; winter wheat low grades \$2.35@2.85; fair to fancy \$3.00@4.65; patents \$4.15@5.00; Minnesota clear \$3.15@4.10; Minnesota straights \$3.60@4.65; Minnesota patents \$4.25@5.35; Minnesota rye mixture \$3.15@3.85; superfine \$2.10@2.75. The minor lines were all featureless.

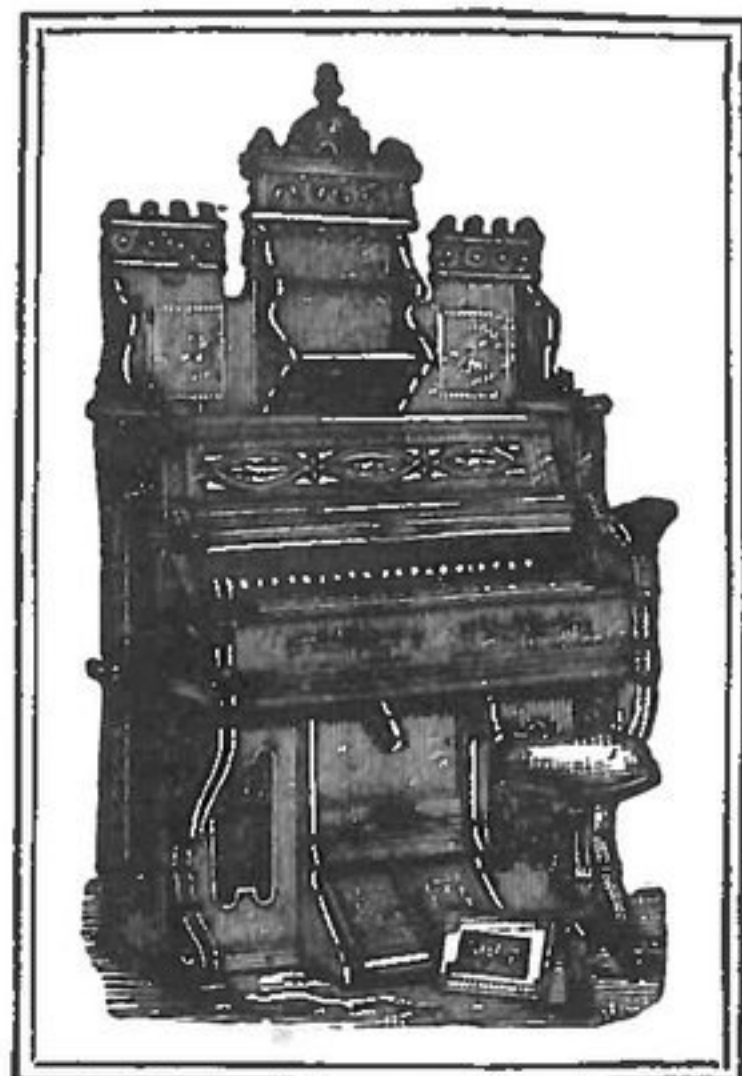
BUFFALO MARKETS.

WHEAT—The market is very dull, with little doing. No. 1 hard is held at 90½c.; No. 1 Northern at 87c.; No. 2 red winter at 85@85½c.; No. 3 red at 75c.; and No. 2 white at 79c. CORN—The market is firm at 38½@39c for No. 2 mixed in store and No. 2 yellow in store is held at 40c. OATS—No. 2 white oats are held firmly at 28½c., and No. 2 mixed at 26½c. The market is firm at these prices. BARLEY—The market is almost entirely nominal. The range is 52@65c for Canada. State is nominal at 40@55c. CATMEAL—Akron, \$6.00; Western, \$5.75 per bbl.; rolled oats, in cases, 72 lbs., \$3.25. CORNMEAL—Coarse, 80@85c; fine, 85@90c; granulated, \$1.50 per cwt. MILLFEED—City-ground coarse winte, \$11.00@11.50 per ton; fine do, \$11.00@11.50; finished winter middlings, \$13.00@14.50; coarse spring do, \$11.50@12.00.

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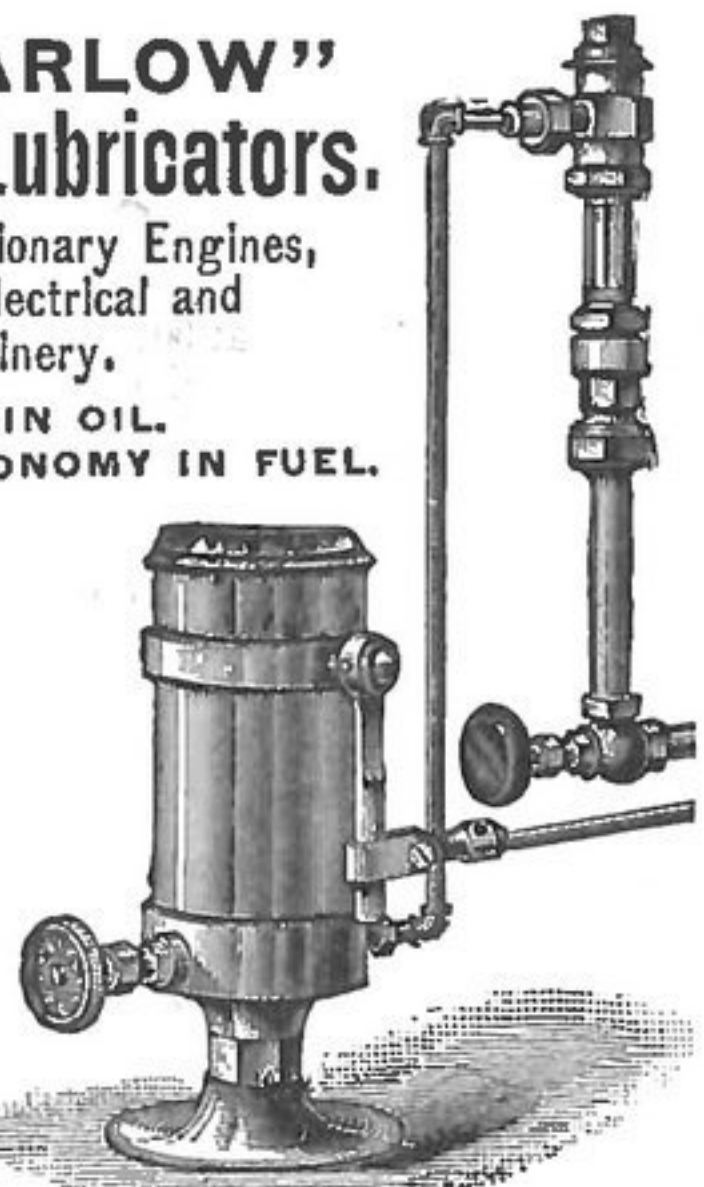
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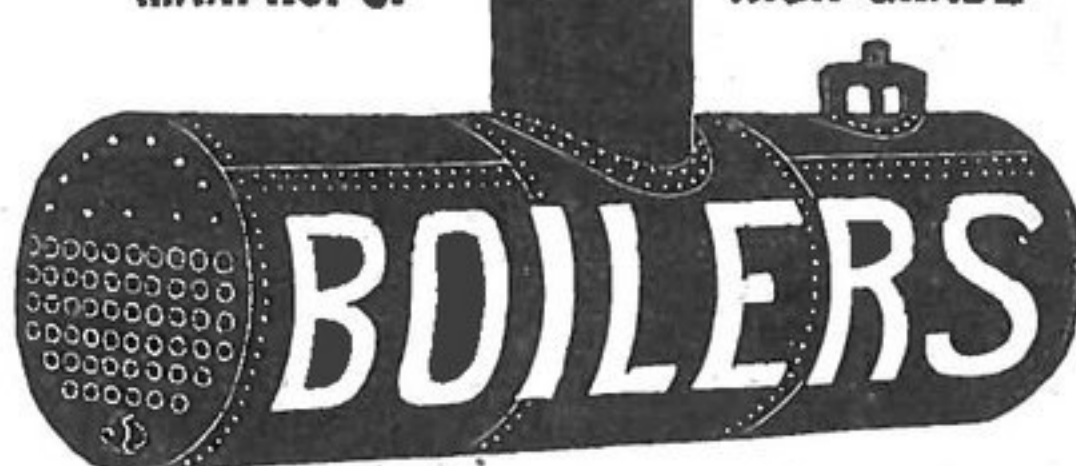
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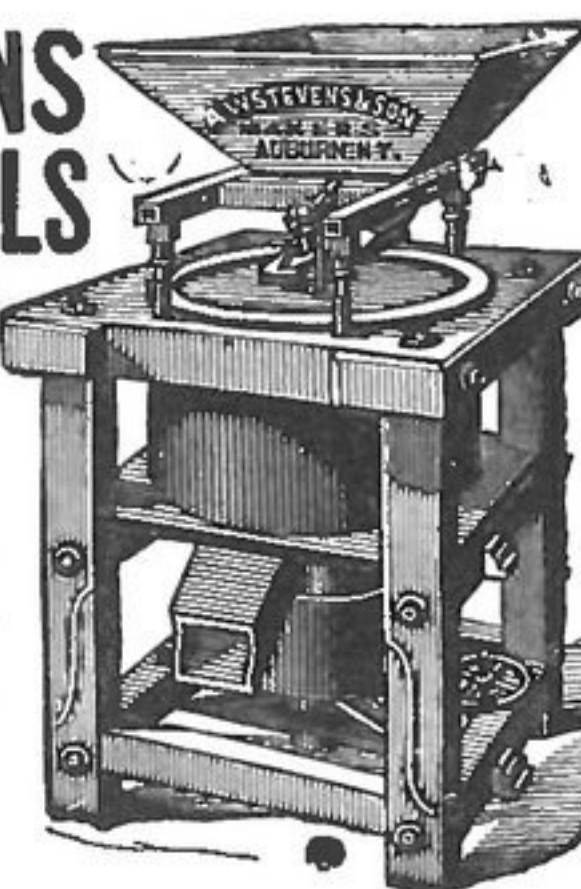
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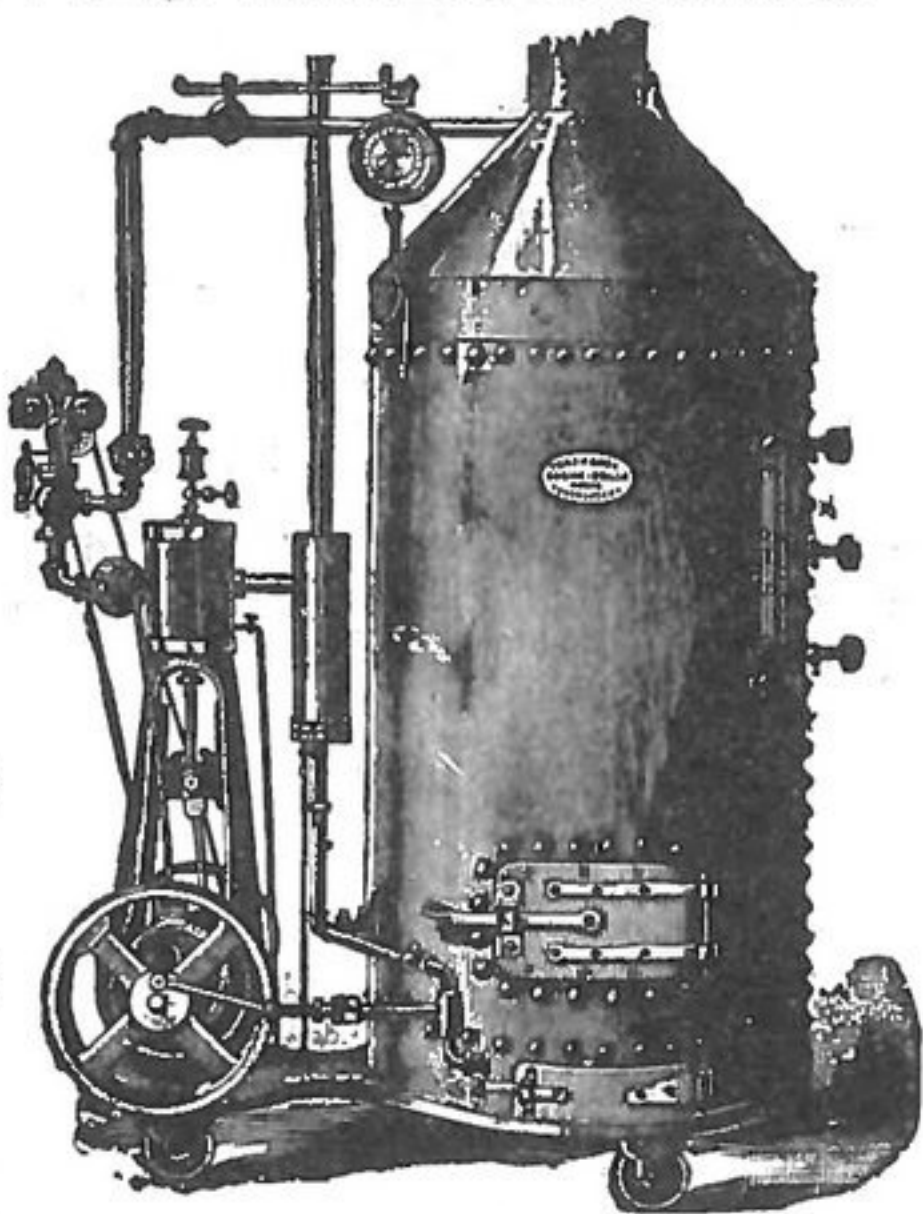
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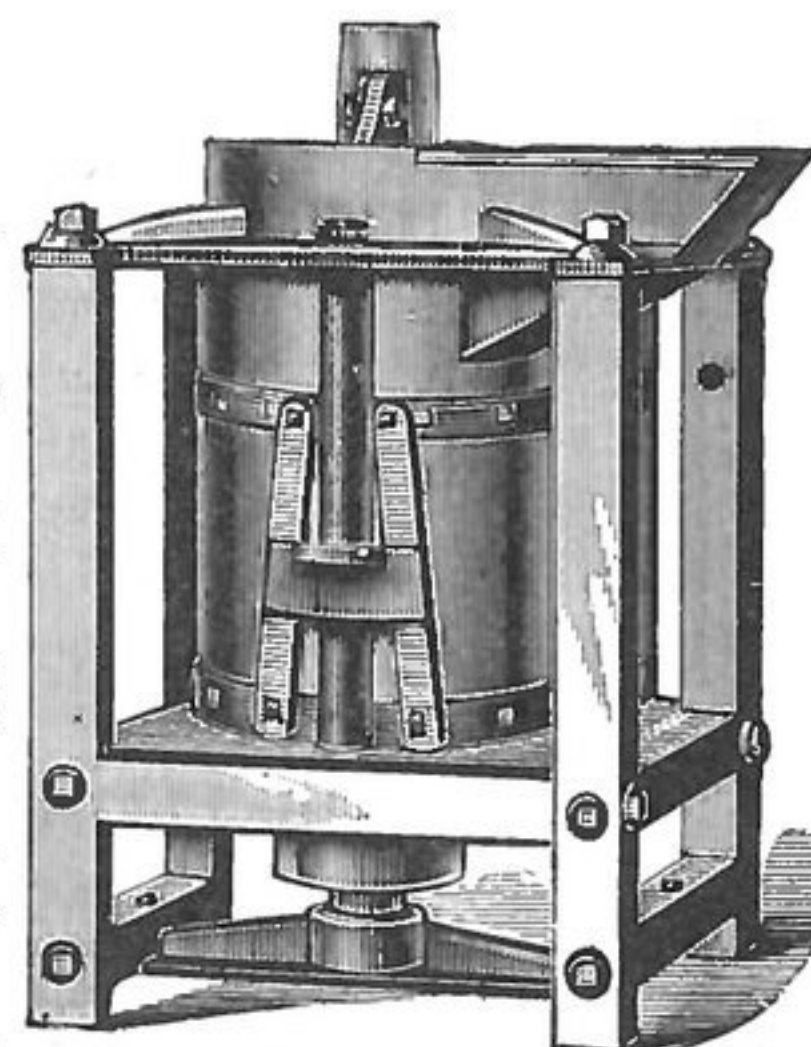
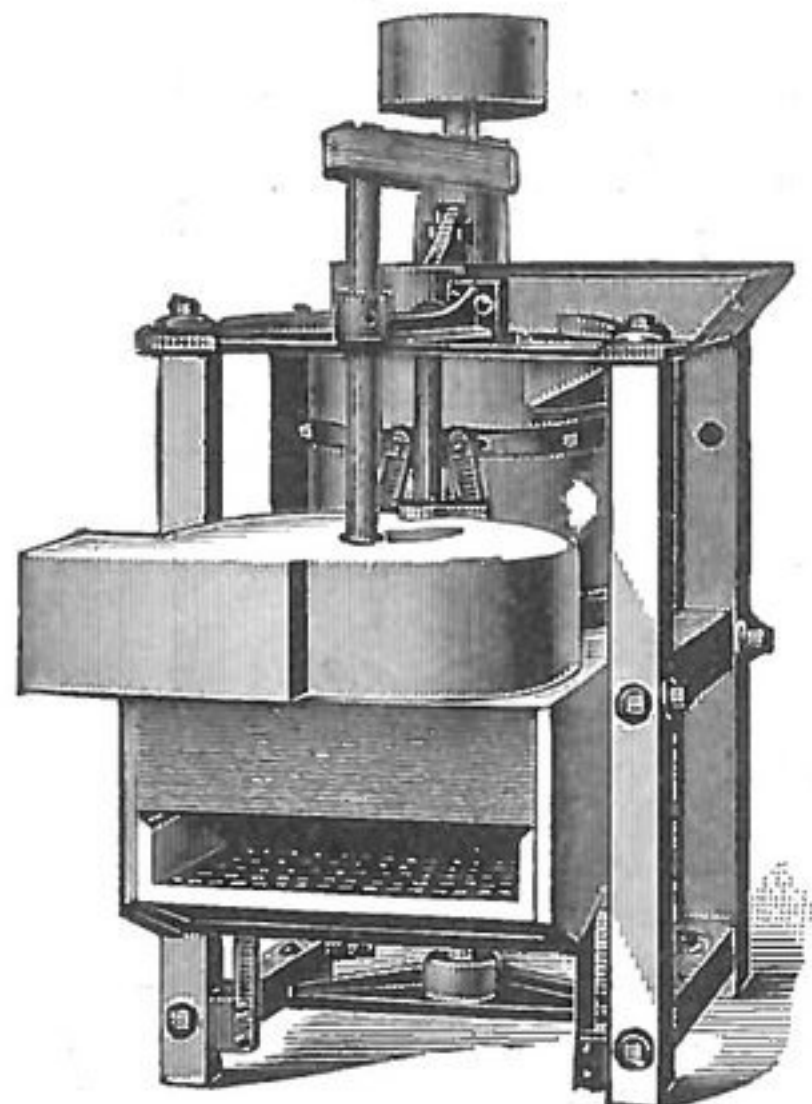
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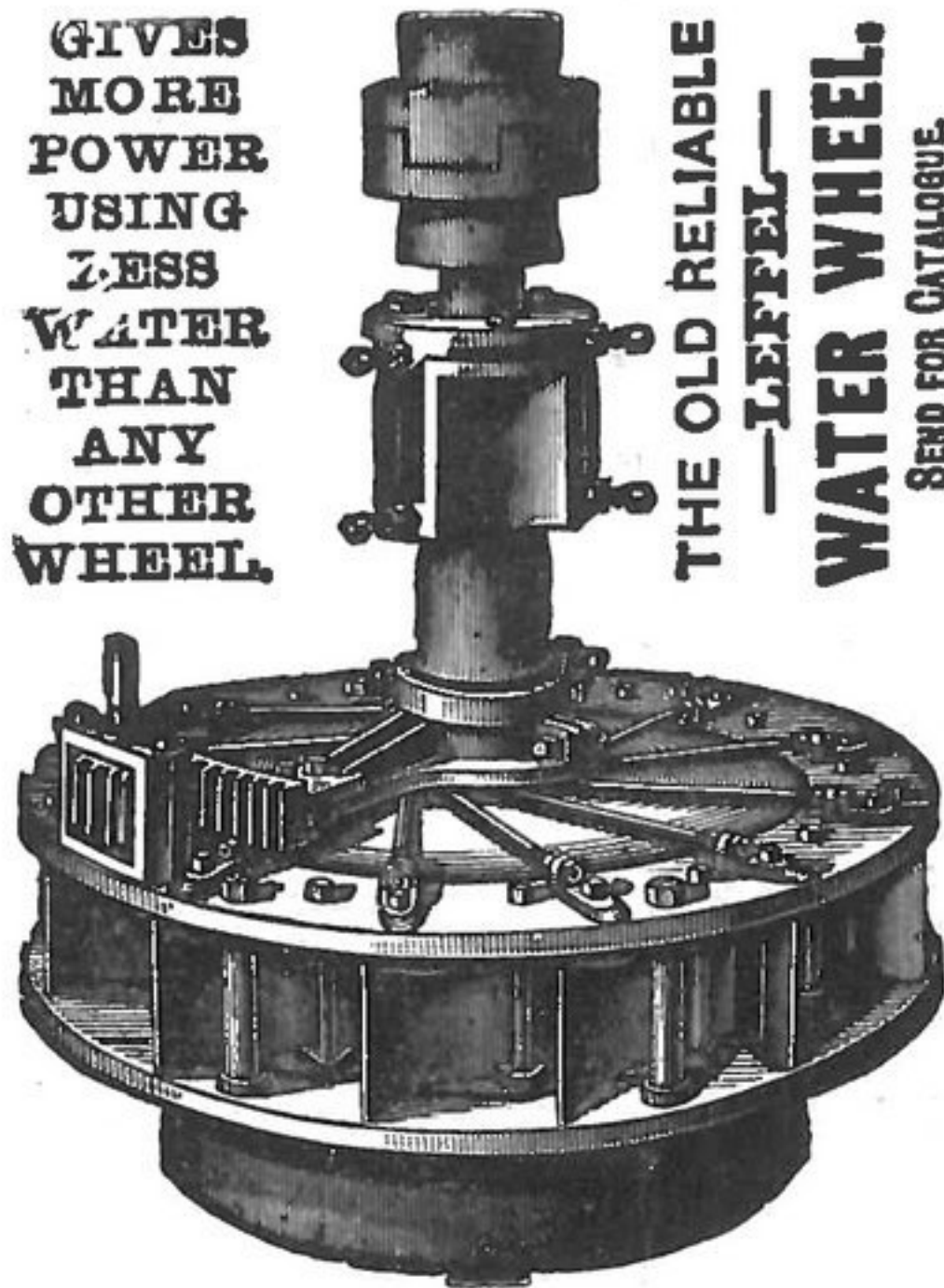
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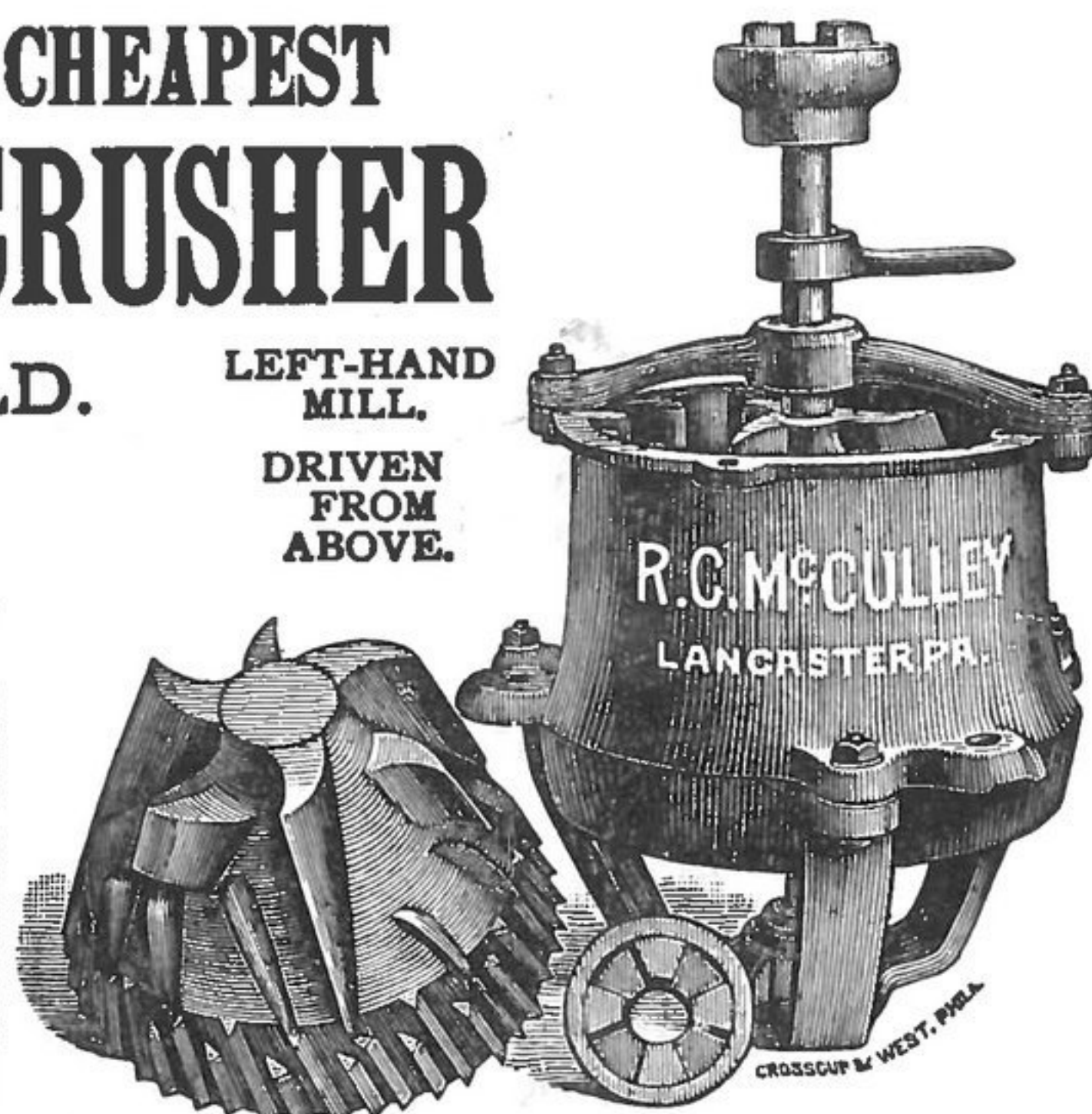
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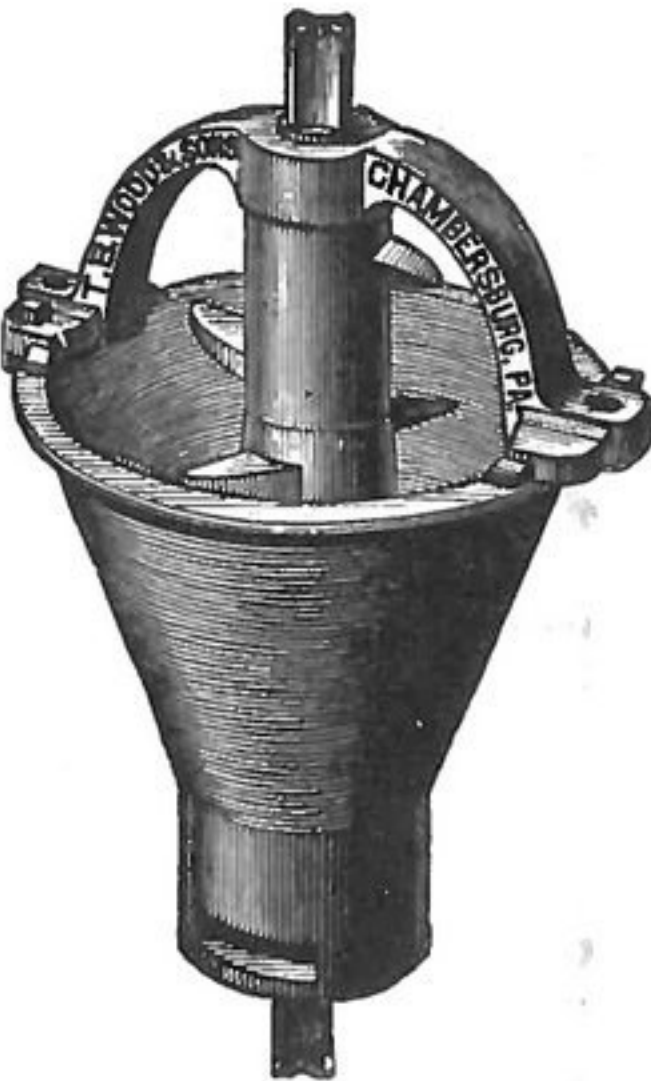


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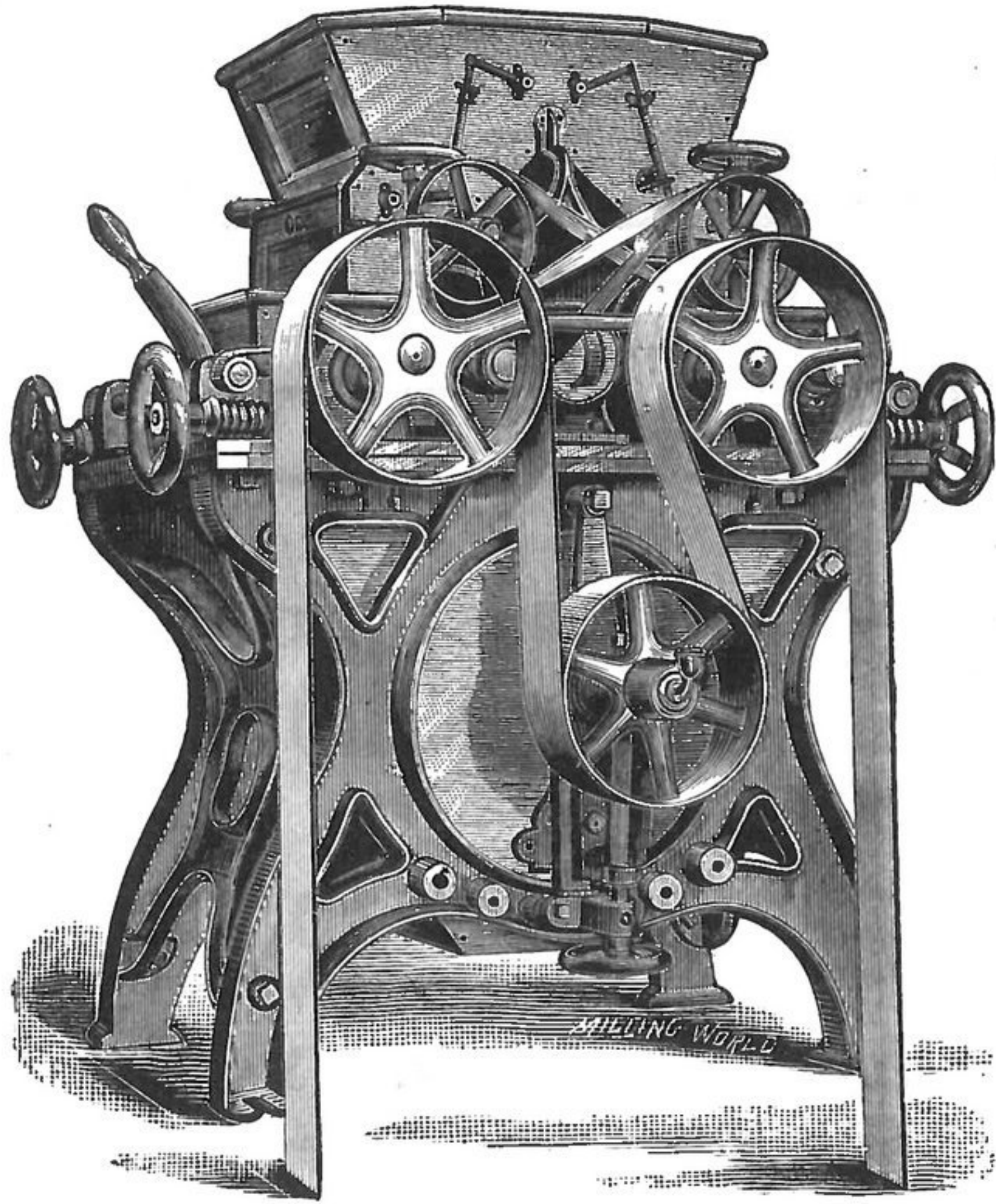
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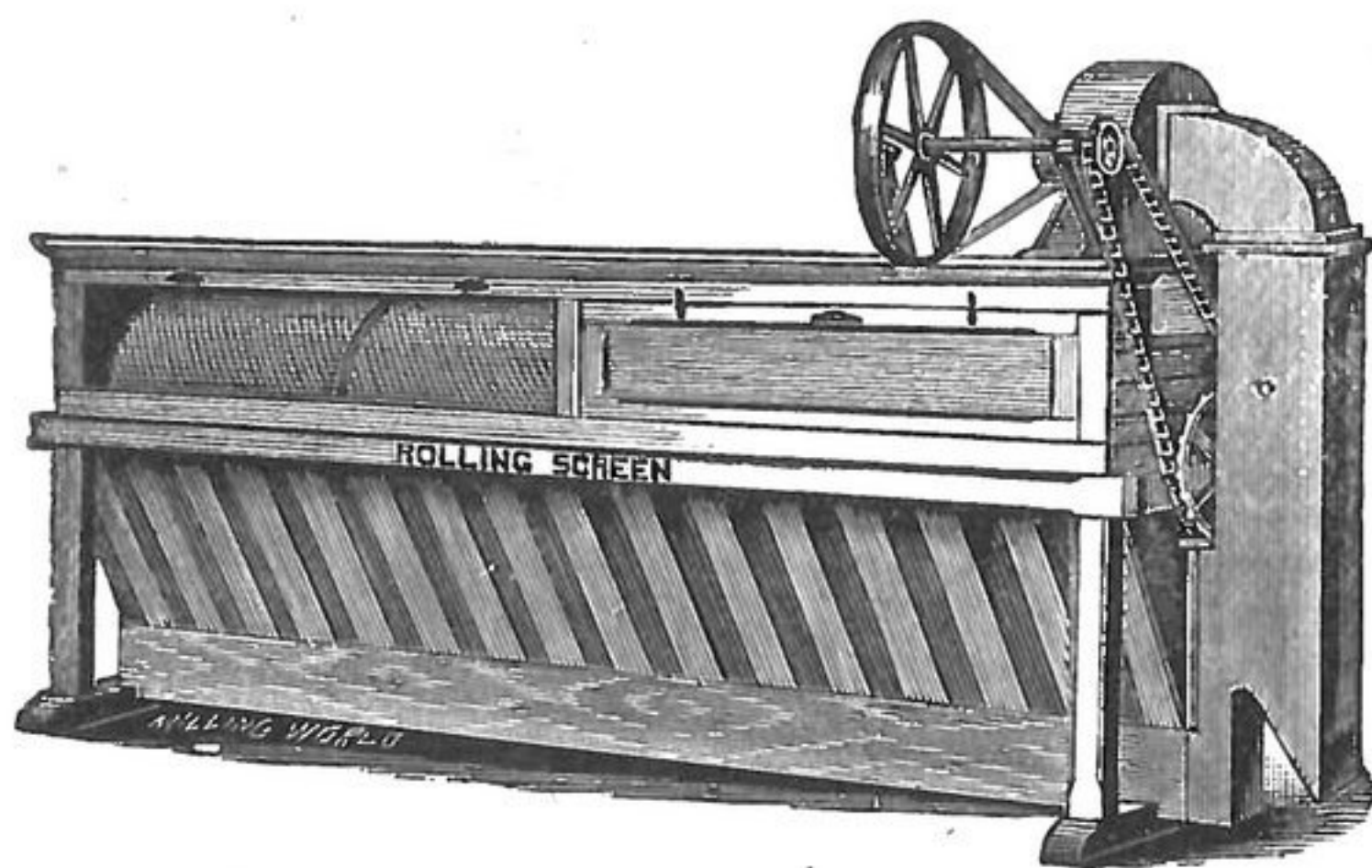
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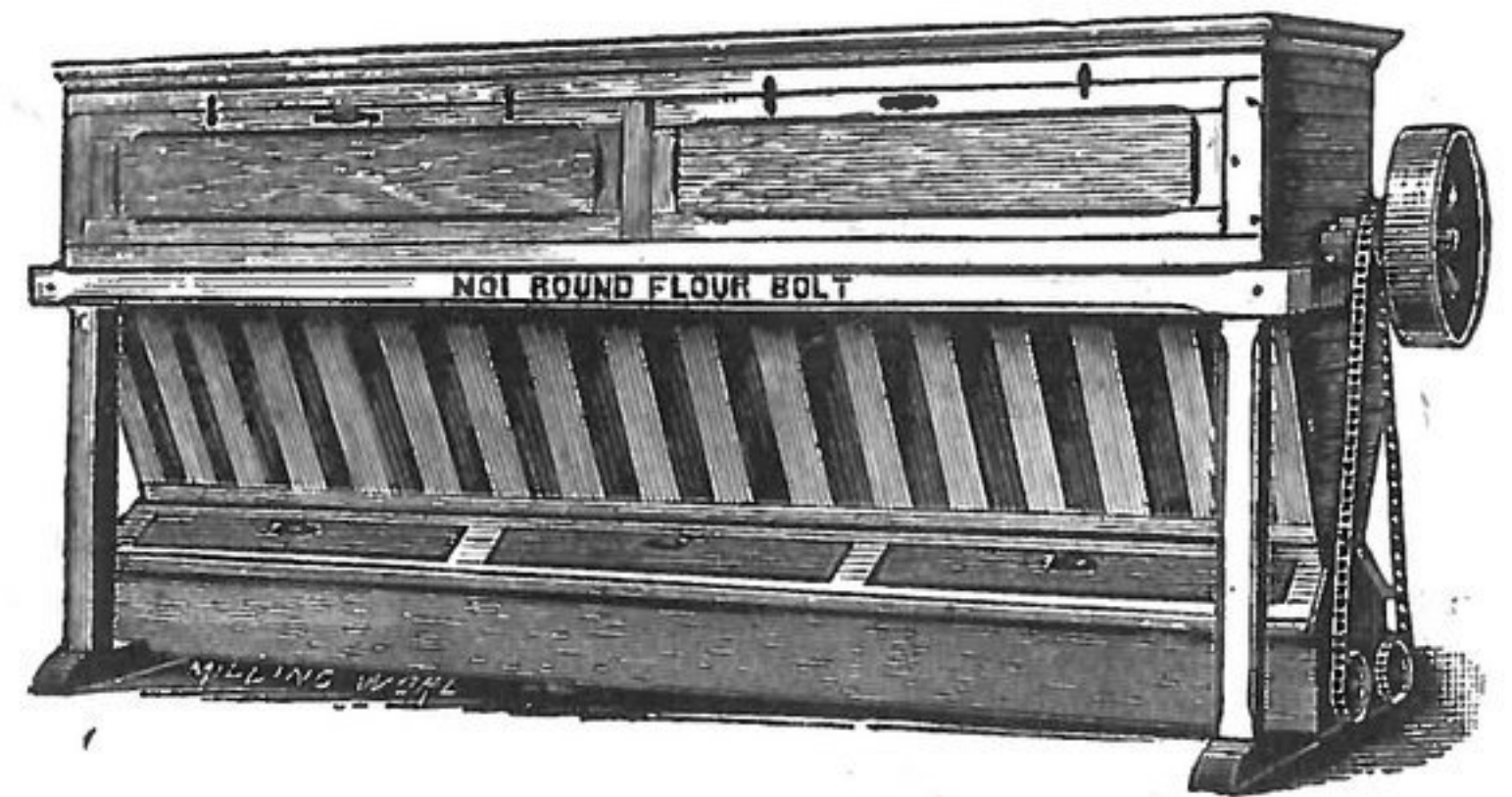
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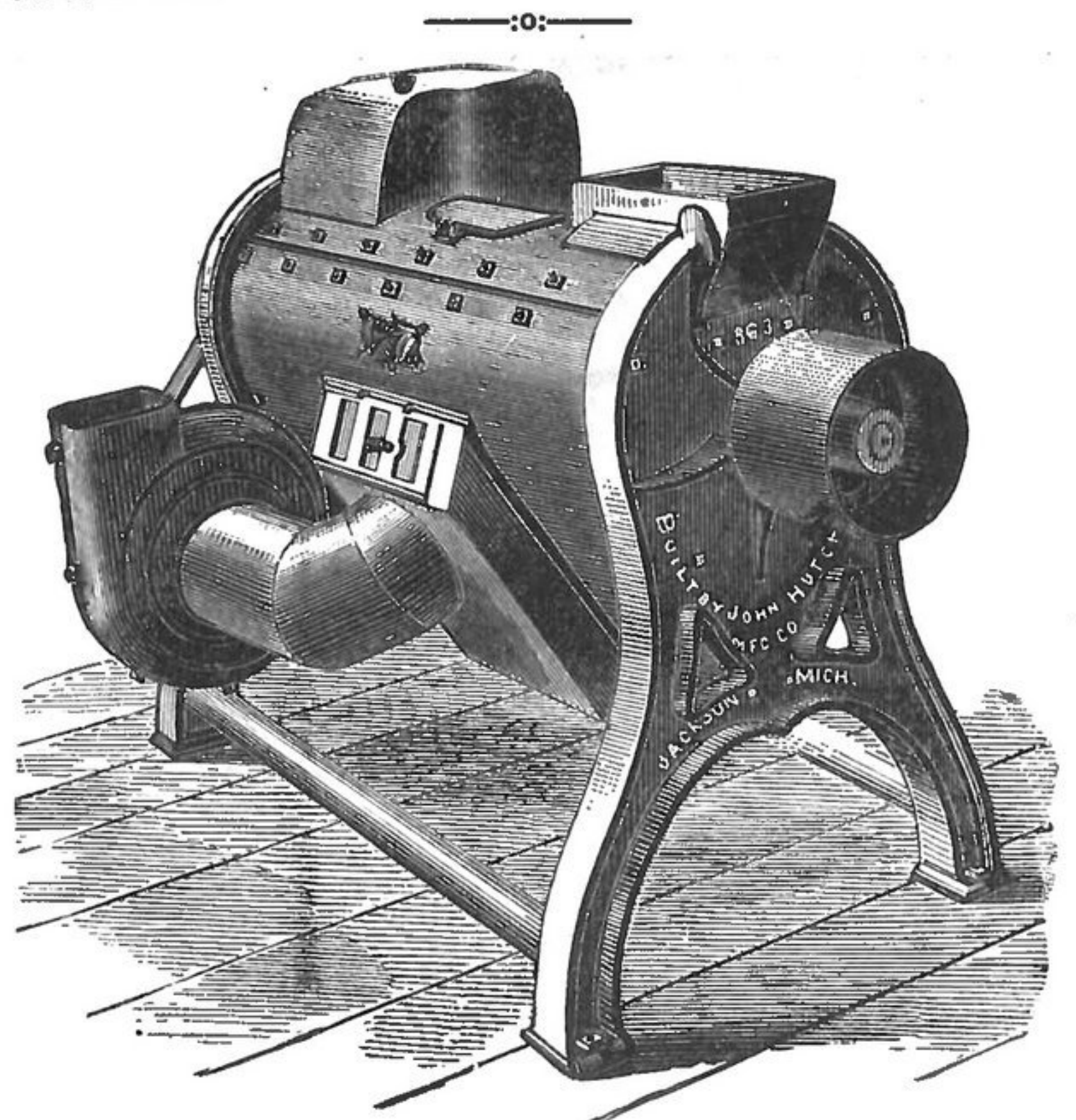


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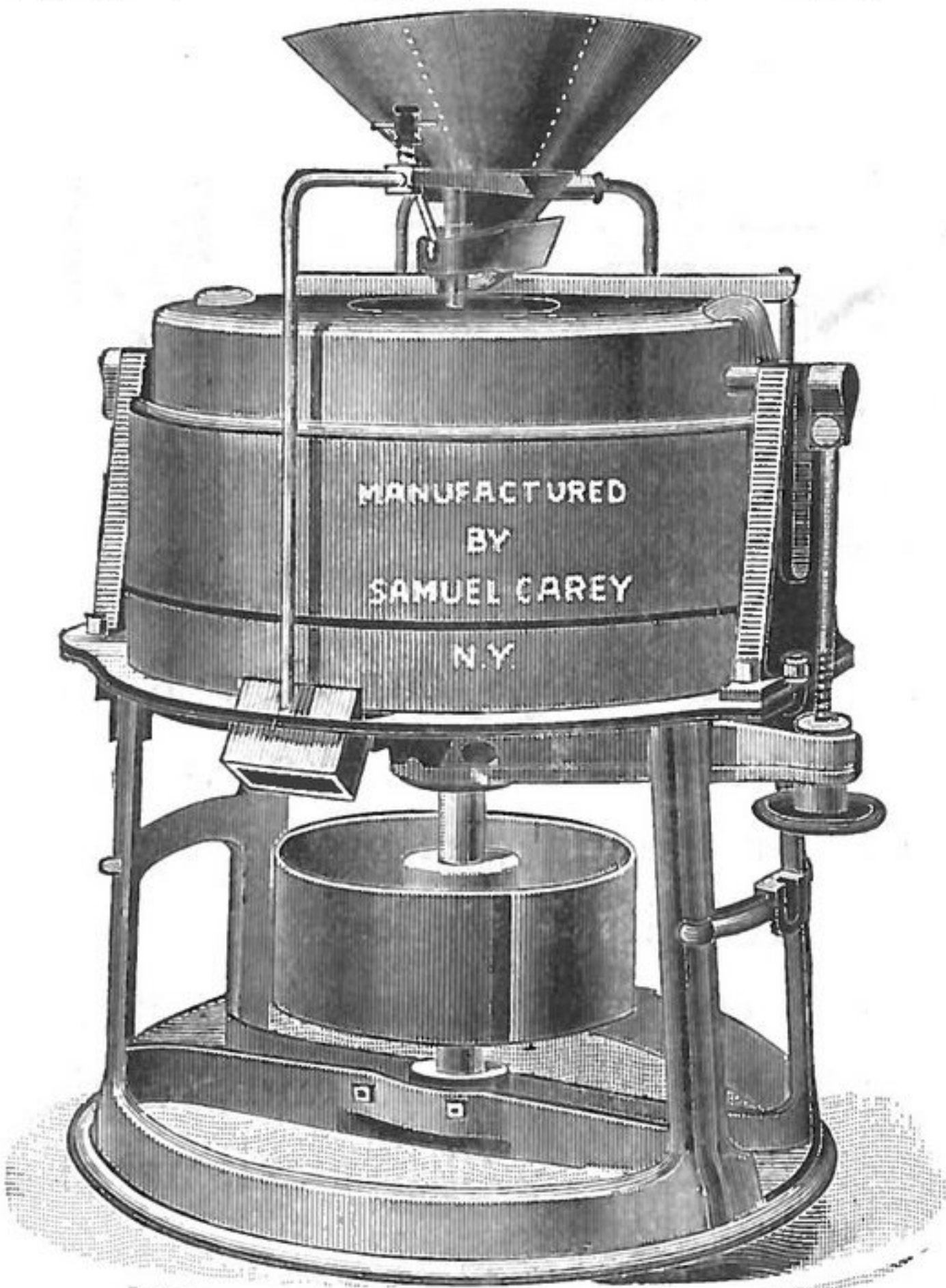
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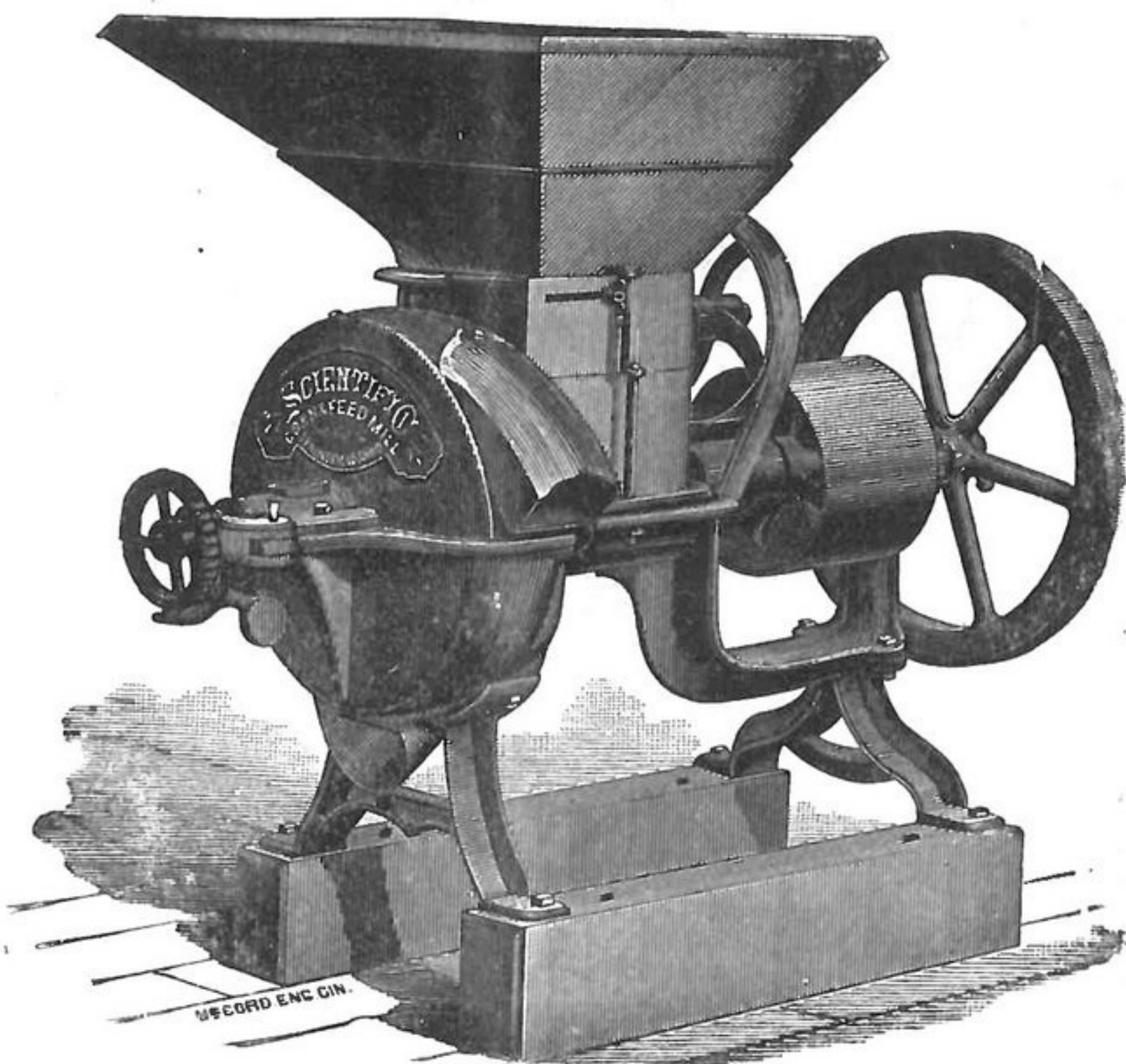
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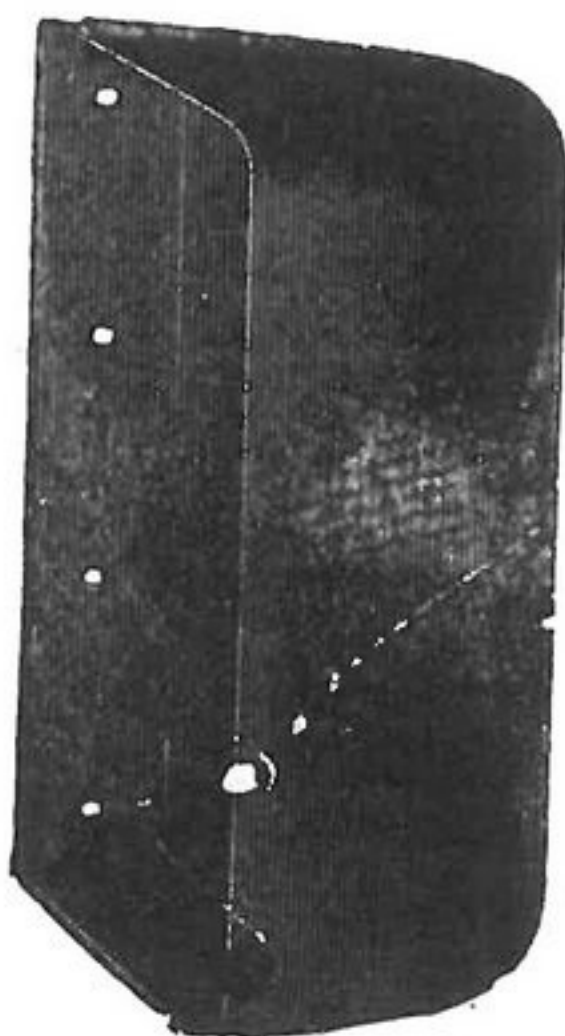
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